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Part I

TABLE *of* CONTENTS

ARTICLES

DIVISIONS

FEATURES

This is Part I of a two-part issue.

REPRINTS*

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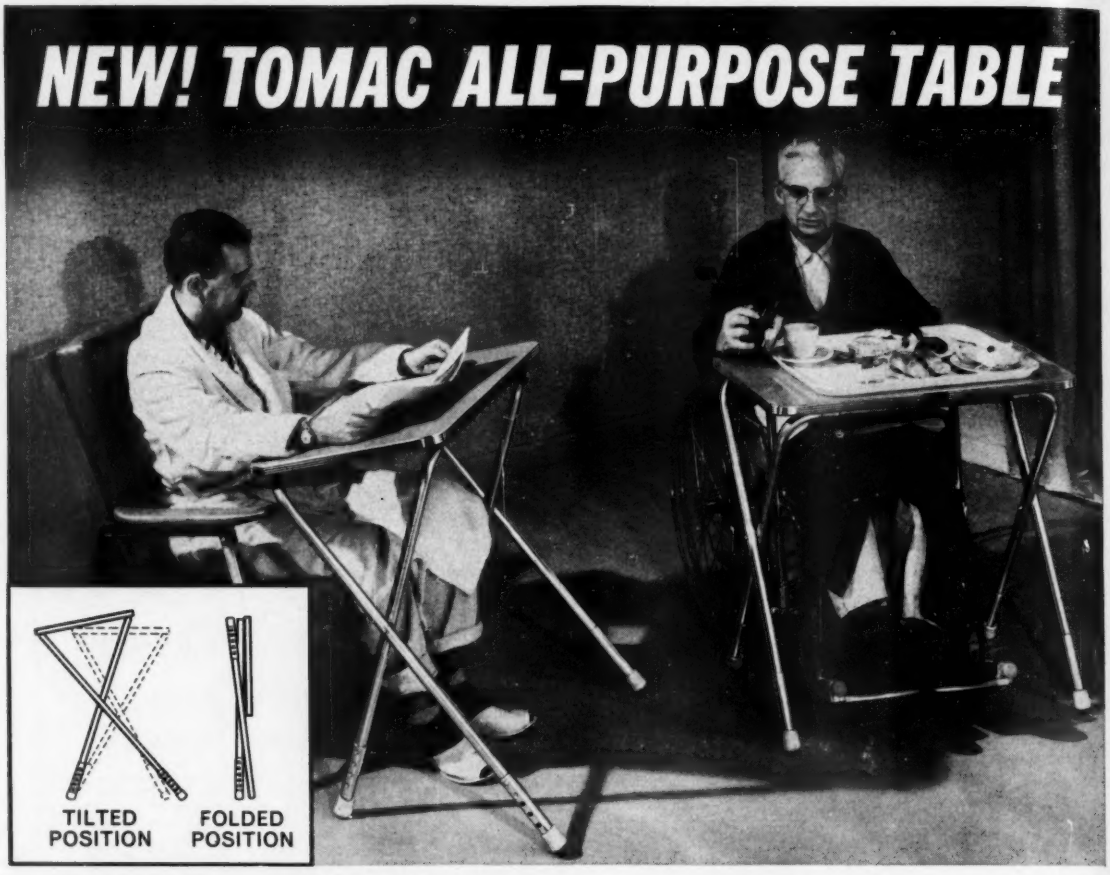

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THE AMERICAN JOURNAL

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UPPER EXTREMITY PROSTHETIC TRAINING FOR THE YOUNG AMPUTEE*

GERALDINE RICHARDSON, O.T.R.
AIDA LUND, O.T.R.†

The subject matter of this article is limited to techniques for the two to four year age group and have been pursued over a period of four years with satisfactory results. Training techniques for the child over four years of age with a functioning prosthesis differ materially from those presented here.

It is assumed that the reader has a basic knowledge of the training of adult amputees and would, therefore, be familiar with the need of stump stocks, T-shirt, application of the prosthesis, care and hygiene as well as a basic knowledge of types of harness and controls used and of checkout procedures. It seems, however, important to state that the *below elbow amputee* is fitted with a simple figure-8 harness, single control system; the *above elbow amputee* (including the elbow disarticulation group) is fitted with a modified Carnes harness, dual control system; and the *shoulder disarticulation amputee* is fitted with the basic SD harness and/or (1) if indicated, a perineal strap to compensate for lack of sufficient power in the shoulder muscles for operation of the terminal device and for forearm lift, and (2) a "lanyard" control (see photograph of same) for operation of the elbow lock.

PROSTHETIC TOLERANCE

On the first day the prosthesis is worn only during training periods, with constant checking of stump and axilla for signs of irritation. If the child accepts the prosthesis and if there are no red areas on the skin, the wearing time becomes two hours on and two hours off. Wearing time is then gradually increased according to the child's acceptance and tolerance until he is able to wear it for all of his waking hours. This is usually accomplished well within a five day period.

TRAINING TECHNIQUES FOR THE BELOW ELBOW AMPUTEE

Step I consists of "selling" the prosthesis to the child by demonstrating to him how the terminal device can open, hold and release a block. The therapist first does this by manually operating the thumb of the terminal device. (Occasionally this method has resulted in the child's later mimicking the pattern with his normal hand; nevertheless, we feel it is better to arouse the child's interest in this manner than to force body control motions before interest is aroused.)

Next the child is shown how he can push, pull and hug objects with his prosthesis (gross pattern) still only to arouse interest. Then the child is encouraged to do it voluntarily.

Three to five half-hour training periods usually suffices for Step I.

Step II begins the body control motion (BCM) by passively taking the child through the range of motions necessary to operate the terminal device (TD).

First, the child is placed in front of a mirror, usually on the therapist's lap (Figure I). Second, saying something like, "Let's touch Ginny's nose," the therapist stabilizes the shoulder on the sound side; then from a position of full elbow extension with arm in a neutral position, passively moves the prosthetic side up to ninety

All photographs by courtesy of the Michigan Crippled Children's Commission.

*A previous article under the title "Observations on the Very Young Upper Extremity Amputee" was published in the *American Journal of Occupational Therapy*, Vol. XII, No. 1, January-February, 1958.

†Director of occupational therapy, Mary Free Bed Guild Children's Hospital and Orthopedic Center, Grand Rapids, Michigan.

Figure I. Passive body control motion for operation of terminal device.

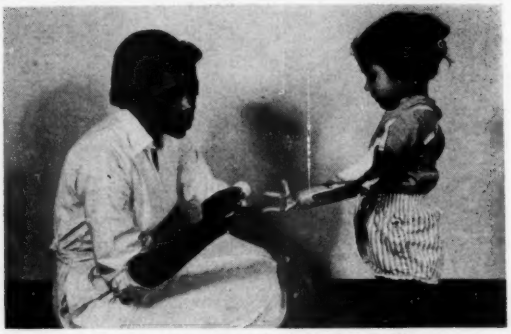


Figure II. Terminal Device Drill

MARY FREE BED GUILD CHILDREN'S HOSPITAL AND ORTHOPEDIC CENTER
OCCUPATIONAL THERAPY DEPARTMENT
CHECK-LIST FOR PROSTHETIC TRAINING

2 to 4 Years

Patient's Name ..... Date .....
Age .....
Amputee Type ..... Doctor .....
Terminal Device .....
Handedness ..... Recorded by ....., O.T.R.

Key √ = can perform 0 = cannot perform — — = not indicated

ACTIVITIES	YEARS	CARRY	OPEN	CLOSE	RELEASE	TOTAL PREHENSION CONTROL
1. Ball	2 to 4	x				
2. Doll	2 to 4	x	x	x	x	x
3. Large Blocks	2 to 3	x	x	x	x	x
4. Pail and Shovel	2 to 4	x	x	x	x	x
5. Rhythm Toys	2 to 4		x	x	x	x
6. Barrel Toys	2 to 4		x	x	x	x
7. Stabilize Paper	2 to 4					x
8. Spring Toy	2½ to 4	x	x	x	x	x
9. Dishes	2½ to 4		x	x	x	x
10. Push Baby Carriage	2½ to 4		x	x	x	x
11. Peg Toys	3 to 4		x	x	x	x
12. Trike	3 to 4		x	x	x	x
13. Lacing Beads	3 to 4		x	x	x	x
14. Cut-outs	3 to 4		x	x	x	x
15. Puzzles	4		x	x	x	x
16. Jumping Rope	4		x	x	x	x
17. Construction Toys	4		x	x	x	x
Pre-ADL						
18. Buttons	4		x	x	x	x
19. Snaps	4		x	x	x	x
20. Zippers	4		x	x	x	x
21. Lacing Shoe	4		x	x	x	x
22. Self-feeding	4		x	x	x	x

To be filled in by therapist:
Has patient completed prosthetic use training? Yes..... No..... Total Tr. Time: .....

Other remarks: .....

If not, please indicate why training was terminated:.....

Approved .....

Figure III

degree shoulder flexion and pushes shoulder forward, as in a reaching motion, to demonstrate to the child how this causes the terminal device to open. We start in this manner because it has proven to be the easiest position for effective TD operation in a young child. Sometimes it is necessary to temporarily shorten the cable to effect demonstration at this stage.

Third, passively return the arm to the neutral position, effecting complete relaxation, thus showing the child how the TD closes.

The performance is repeated until the child begins to assist voluntarily, then the child is asked to repeat motions independent of assistance.

Motions achieved are as yet uncontrolled. The first goal is to arouse the child's interest in the prosthesis, otherwise one cannot expect even a minimal amount of cooperation when teaching body control motions.

It is essential that the closing force of the rubber bands be accommodated to the individual child's strength. Training is usually started with one-quarter to one-half a standard TD rubber band.

One training period usually suffices for Step II.

Step III consists of the body control motions drill. To open the TD with elbow in full extension, the therapist stabilizes the shoulder on the sound side and with the other hand brings the humerus forward in a forceful, reaching motion to approximately forty-five degrees flexion, telling the child to "push stump into socket."

To close TD, the therapist returns arm to neutral position thus showing the child how the TD closes.

The above performance is repeated until the child begins to assist voluntarily. Ask the child to actively demonstrate opening and closing the TD, employing any small toy, preferably soft and non-slippery, as a motivating factor (Figure II). (Release of object is taught later. At this stage the child would confuse it with opening for grasp.)

To open and close TD with elbow at ninety degree flexion, and to open and close TD with elbow at one hundred and thirty-five degrees flexion, the same procedure is followed.

Drill in the successive positions is necessary until the child is proficient in opening and closing the TD, and closing the TD by scapular adduction without changing the position of the arm should be encouraged.

At the completion of these drills, the following amount of TD opening may be expected:

100% with elbow in 180° extension
50% with elbow in 90° flexion
15% with elbow in 135° flexion

TD operation is usually in the following order: open, close, release.

Body control motion training for TD operation is ordinarily stressed from three to five days.

Step IV introduces biteral activities with emphasis on coordination and reciprocation. The choice of activities and/or toys to be used depends upon the motor and intellectual development of the individual child. The check list for prosthetic training (Figure III) is presented as a guide to the types of activities that might be employed at various age levels. A high level of performance should not be expected; as soon as a child *actively* demonstrates a procedure another activity can be attempted.

Figure IV. Prepositioning Terminal Device

It might be noted that in reaching for an object, the child will at first close upon this object by partial extension of the humerus instead of relaxation to produce scapular adduction. In the course of Step IV the child is shown how to preposition his terminal device to obtain the most functional position (Figure IV).

Bilateral activities for coordination and reciprocation should begin at approximately the end of the first week of training and continue throughout the entire training program. (Figure V.)

Step V is prehension control training and for a child between two and four years of age consists of instilling in him an awareness of how much he should open the terminal device in order to grasp an object. We have found that fine prehension control training, such as used with older patients, is meaningless to a young child. He apparently cannot learn the selective force needed to hold objects of varying density. For example, he continues throughout training to hold a piece of bread or a banana with the same force as he does a wooden block, with blissful indifference to the fact that the bread or banana is completely squashed.

Figure V. Bilateral activity, terminal device prepositioned.

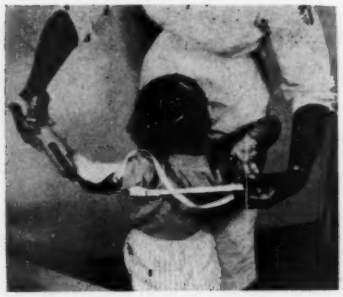


Figure VI.

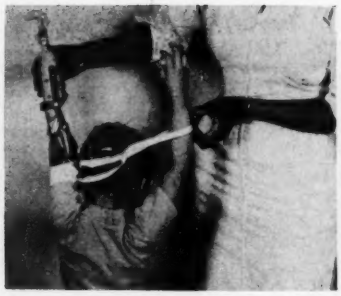


Figure VII.

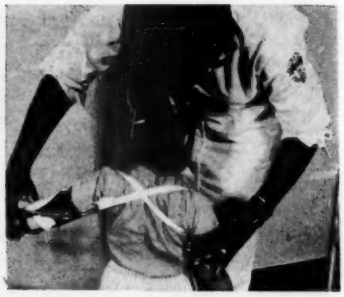


Figure VIII.

Therapist is applying prosthesis. Note position of cross in Figure VIII.

Step VI involves pre-activities of daily living (ADL). The advisability of teaching any ADL activities depends upon the maturity level of the child. When indicated by developmental level, the child is taught the simpler activities such as:

Pulling on a sock (2 yr. old)
Stabilizing a plate when eating (2 to 4 yr. old)
Pulling straw from paper wrapper (2 to 4 yr. old)
Lacing practice shoe (3 yr. old)
Stabilizing bread for buttering (4 yr. old)
Buttons, snaps and zippers (4 yr. old)

No mention has been made so far of teaching the child to put on or take off his prosthesis independently (Figure VI, VII and VIII). We have found this to be impractical for a child under four years of age. While the application is too complicated for the child at this age he does, however, become aware of the procedure. This is evidenced by the fact that when an inexperienced attendant attempts to apply the prosthesis incorrectly, or forgets to apply the stump

AMPUTEE BASIC TRAINING

FOUR YEARS AND UNDER

NAME:_____ TYPE OF PROTHESIS:_____

AGE:_____

DIAGNOSIS:_____

TRAINING TIME
Dates:_____
Hours:_____

Handedness:_____

			PERFORMANCE
TIME			
ACCEPTANCE			
PRIMITIVE USE			
PROSTHETIC CONTROL	CABLE	GRASP	
		RELEASE	
		FOREARM CONTROL	
		ELBOW LOCK	
	PREPOSITION T. D.		
FUNCTIONAL USE	PREHENSION CONTROL		
	COORDINATION		
	RECIPROCATION		
	SELF HELP	PRE-DRESSING	
		EATING	
AWARENESS OF POTENTIALITIES			

KEY – __GOOD __FAIR __POOR __CANNOT PERFORM

THERAPIST_____ OTR.

Figure IX.

Figure X. Control Training.

sock first, the child will usually protest.

Step VII, the awareness of potentialities, sometimes begins during Step IV, but more often toward the completion of the training program. During the final week of training, the therapist may test for awareness by presenting the child with motivating objects in order to observe how efficiently the child performs *without* specific direction. One should never expect full awareness of potentialities during the early training period in a child under four years of age. What is attempted is to "plant the seed" of such awareness so that it will develop gradually after the child returns home. How much or how quickly it develops at home depends upon the individual child and upon the cooperation and understanding shown by the parents.

The amputee basic training chart for children four years of age and younger (Figure IX) has proven helpful in recording the progress made by the child and in determining the rate of progress to expect at various age levels and at various amputation sites.

TRAINING TECHNIQUES FOR THE ABOVE ELBOW AMPUTEE

Step I is teaching the operation of the terminal device. The same procedure is used for the above elbow as for the below elbow amputee except that the therapist manually operates the elbow to permit TD function.

Step II is control training for forearm placement. For *flexing the elbow,* the elbow is unlocked with arm in full extension at the side. The therapist places one hand on the acromion-clavicular joint, amputated side, while the other hand is placed on the posterior aspect of the humerus (Figure X). Pressure is applied at the shoulder joint and the humerus is gently pushed forward, thus effecting forearm lift.

The procedure is repeated, taking the arm through the full mechanical range of motion, until the child gets the pattern and begins to assist voluntarily. The child should be able to perform independently before going to the next procedure.

For *extension of the elbow,* the therapist flexes and supports the humerus in position for maintaining full elbow flexion (approximately 135°). The therapist slowly allows the humerus to return to neutral position thus effecting elbow extension. The procedure is repeated until the child gets the pattern and actively begins to assist. The child should learn to execute this motion independently.

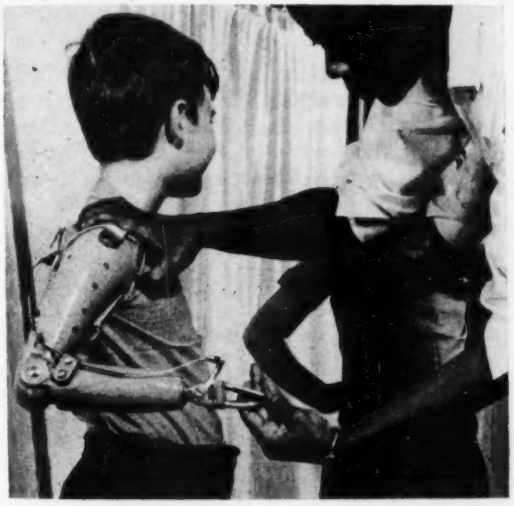


Figure XI. Teaching Elbow Lock Control

Forearm placement is practiced voluntarily by the child, the therapist asking him to position forearm at varying levels until control is perfected.

Once the *initial* body control motions are taught, the training is continued with the aid of motivating objects in order to achieve cooperation from the child. This is usually done by the therapist placing a block or other object in the terminal device and asking the child to bring the object in contact with her hand which she positions at various levels.

Step III, the elbow lock operation, is a more difficult procedure for the child to master. To *lock the elbow,* the therapist positions the elbow at a ninety degree angle, unlocked. The therapist grasps the terminal device, placing her other hand on top of the patient's shoulder (amputated side) for depression of the shoulder or for pumping of stump into the socket (Figure XI). The therapist pushes the humerus into hy-

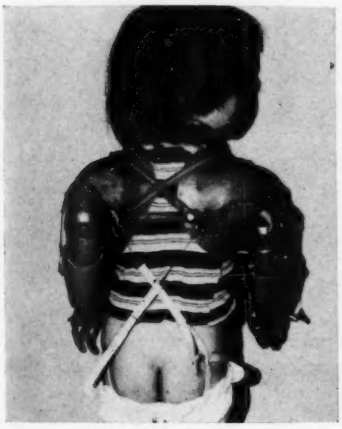


Figure XII. Perineal straps for terminal device operation and forearm lift.

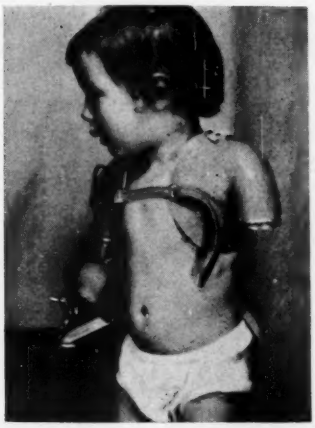


Figure XIII. Temporary Shoulder Cap.

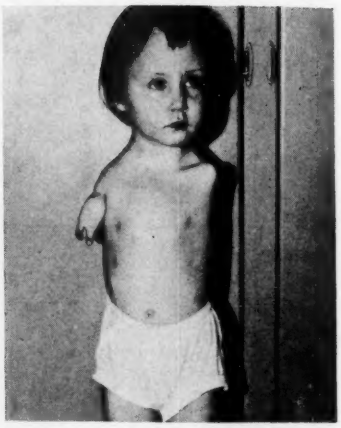


Figure XIV. Bilateral shoulder disarticulation; left sided amelia, right sided phocomelia.

per-extension thus causing the elbow unit mechanism to click and lock. The therapist then returns the arm and shoulder to neutral position thus causing elbow unit mechanism to complete the locking cycle. The therapist repeats the locking phase at the ninety degree angle until the pattern is established.

The above procedures are repeated at various angles from full extension to full flexion of the elbow, and repeated until the child begins to actively assist and to voluntarily relax in order to achieve the "click" of the mechanism. Throughout the procedures, the forearm placement is done by the therapist and all procedures of locking are repeated until the child can perform independently.

The same procedure for *unlocking the elbow* is followed as for locking the elbow.

The motion of hyper-extension of the humerus can be motivated in the child by asking him to touch some object behind him with his elbow.

Step IV is the teaching of combined motions. With the elbow unlocked, the child actively brings forearm up, therapist stopping flexion usually at ninety degrees. The therapist places one hand on shoulder (amputated side) to encourage "pumping" action while the other hand supports the elbow and the humerus.

The therapist abducts humerus to almost ninety degrees and then hyperextends humerus until elbow unit clicks and locks. This is repeated until the patient assists in abduction, hyper-extension and pumping action of stump. When patient begins to do it voluntarily therapist ceases to give support to elbow and humerus. The performances are repeated until perfected and then action without abduction of humerus is strived for through practice in front of a mirror which is helpful in eliminating awkward body control motions.

Drill for the combined motions of bringing up forearm, locking elbow, grasping an object. During the drills, reverse the motions and repeat at various levels. Activities useful for practice or drill are building with blocks and the transference of objects from one level to another on the vertical and horizontal planes.

TRAINING TECHNIQUES FOR THE SHOULDER DISARTICULATION

Step I is the operation of the terminal device. The motion needed for operating the terminal device is bilateral scapular abduction with most of the power coming from the sound side.

The procedure is for the therapist to stand behind the patient and push both shoulders forward, then bring them back to neutral. Repeat the motion until the pattern is set. If the child is unable to get sufficient power from scapular abduction to obtain forceful scapular abduction, he may be taught to assist by forcefully flexing the humerus of the sound side with elbow in flexion and shrugging shoulder forward against resistance supplied by the therapist.

If sufficient force is still lacking, the child is fitted with a perineal strap running from the shoulder cap, posteriorly, to the opposite thigh (Figure XII); the perineal strap is activated by scapular abduction of the amputated side with a slight rotation of the trunk and arching of the back.

Step II involves forearm placement. Body control motions for power to lift forearm are the same as above in Step I. Procedures used for placement training are the same as those used for the above elbow amputee except that the body control motions are the same as in Step I of SD.

Step III uses the lanyard control for the el-

bow lock. Fitting the very young SD with a lanyard control for the operation of the elbow lock has proven very successful.

The body control motions for operation of the lanyard control are elevation of the shoulder (amputated side) and relaxation. To get the child to elevate the shoulder sufficiently, ask him to try to touch his ear with his shoulder.

The procedure is repeated until the lock operation is perfected.

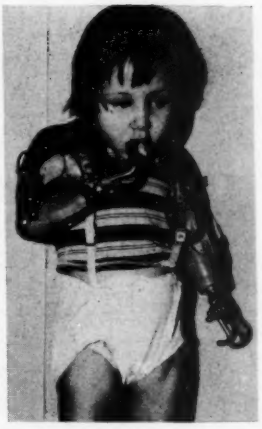


Figure XV. Lanyard control of elbow on left; phocomelia controls right elbow lock.

TRAINING TECHNIQUES FOR THE BILATERAL AMPUTEE

In the bilateral amputee, one side at a time is usually fitted and trained. (The SD is sometimes fitted temporarily with a shoulder cap on the opposite shoulder, Figure XIII). The procedures are at first the same as would be employed for a unilateral.

When both sides have been fitted, divorcement of controls, coordination and reciprocation must be taught (Figure XIV and XV). When operating controls on one side, the other side must be stabilized. When operating both prostheses at the same time extreme scapular abduction is required. When teaching reciprocal motions the dominant side is operated first, then stabilized and the assistive side operated. Initially, there will be some overflow until the child has mastered the controls.

TRAINING TIME ELEMENT

It is most difficult to set up a definite time table for conducting the training program due to the variability in the reaction of the individual child; and the fact that while four weeks is considered the ideal length of time for training a below elbow amputee under four years of age, he must often be discharged at the end of two or three weeks because of practical considerations and the reluctance of parents to hospitalize the child for so long a period. In this article, therefore, we have divided the training program into various steps rather than giving the time element involved in each separate procedure.

Since, however, it may be of interest to some readers to know what we consider the ideal training program, the time table for a below elbow amputee is presented in Figure XVI. Total training time for a below elbow amputee, accordingly, requires four weeks of in-patient stay which consists of twenty training days or forty hours of formal training, conducted in half-hour periods four times a day. Total training time for an above elbow amputee would approximate six weeks in-patient stay.

BELOW ELBOW TIME TABLE FOR THE CHILD UNDER FOUR YEARS OF AGE

Pre-prosthetic period (for establishing rapport).....2 days

Step I and II .....2 days

Step III .....3 to 5 days

Step IV starts at approximately the 6th training day and continues to the end of the 3rd or 4th week

Step V starts at approximately the 11th training day and continues throughout

Step VI and VII starts at approximately the 13th training day and continues throughout

Figure XVI

The length of training required naturally increases with the higher site of amputation and difficulties that may be encountered such as lack of existing muscle power, prosthetic changes, etcetera.

In the event that the training period is of limited duration the therapist should attempt to carry the child (if a below elbow amputee) through Step V. Steps VI and VII could then be thoroughly explained and demonstrated to the parents and written instructions as to how to proceed should be given to them. How skillful a user the child becomes under these circumstances depends largely upon the cooperation of the parents. It is possible for them to become very skillful in the use of the prosthesis. We always ask the parents to keep a weekly diary of the child's progress which is reviewed upon return clinic visits approximately every three months.

This issue is published in two sections and Part II is compiled as a buyer's guide. It lists suppliers of occupational therapy equipment and media supplies. For the convenience of our readers, the Journal advertisers are listed in bold face type for ready reference. Support these companies as they have evidenced their desire to serve you by introducing you to their products during the past year in the advertising section of the *American Journal of Occupational Therapy.*

SELF-HELP ADAPTATIONS FOR THE ADULT CEREBRAL PALSIED WOMAN

PATRICIA HOLSER, O.T.R.*
BONITA WARD MICHAELSON†

INTRODUCTION

The following suggestions have been found to be invaluable to ease the problems of the athetoid adult who must assume all phases of household duties and self-care. Many adaptations in use with other types of physical disabilities are useful, but often the persistent involuntary motions of athetosis pose unusual problems. Some of the improvisations are original to the cerebral palsied co-author of this article, whereas others were made by the author or students.[1] This is by no means a complete list, but we would like to share our knowledge with others who may find it useful.

KITCHEN ADAPTATIONS

Liquid pourer. A box six inches in depth and four inches by four inches in width can be mounted by ball bearings between two uprights on a base so that the box swings free. Various liquids that are difficult to pour, such as milk, cooking oils, vinegar, etc., can be placed in the box. (Figure I.) In some instances, however, it may be just as simple to syphon off what is needed with plastic tubing that can be easily washed.

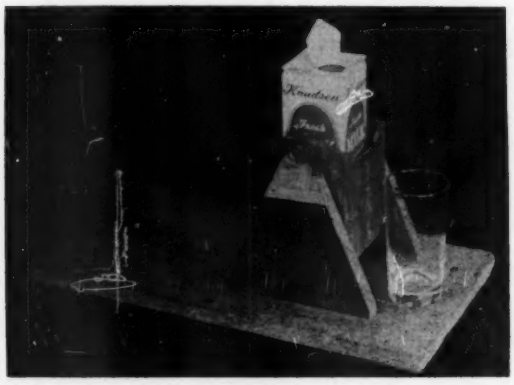


Figure 1

Salt can be measured after finding out through practice, how many shakes from the shaker makes a quarter teaspoon. This eliminates the mess involved when using measuring spoons.

Real homemade biscuits and pie-crusts for special occasions can be made with liquid shortening stirred into the flour with a fork. In that way no time-consuming pastry blenders or knives are needed.

Vegetable board. A board one inch thick, ten inches long and eight inches wide with a formica top and three headless, stainless steel nails driven about one inch apart in the center of the board can be used for peeling potatoes. Serrated rubber matting glued on the bottom stops the board from sliding. A potato is pushed down on the nails which hold it for peeling the top half. The potato is then turned over, pressed down into the nails again and the other side peeled. If done in the sink, the holder will be less apt to slide and peelings are easier to clean up.

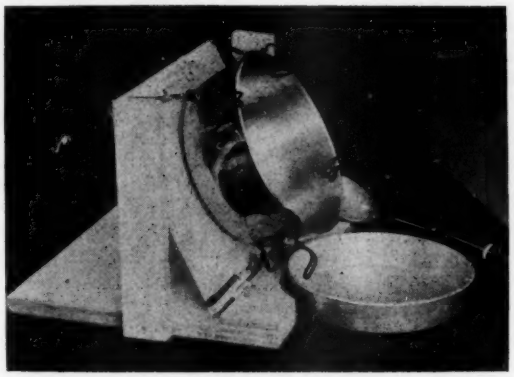


Figure 2

Bowl holder, pourer and apple corer. This adaptation (Figure 2) enables the homemaker to hold a bowl steady while mixing. It also allows the bowl to turn on its side so the ingredients can be poured or scraped with the use of one hand only.

The base is made of two pieces of one-half inch plywood with the top piece hinged to the bottom. The bowl is secured to the top piece by cup hooks attached to four springs which have been screwed to the corners of the board, thus they hook over any size bowl.

A curved cutout is made in the edge of the bottom board on the hinged side to insert pans underneath the bowl when it is raised to a seventy-five to eighty degree angle. This is done by grasping a handle at the far end of the top board. As it is raised, the top board is held with the bowl attached upright by cupboard door latches that insert into the uprights. This enables one to have hands free to scrape the bowl.

*Director of occupational therapy, United Cerebral Palsy Association, Los Angeles County, California.

†Cerebral Palsied trainee at the United Cerebral Palsy Association.

Figure 3

This same apparatus can be used as an apple corer by screwing the wooden handle of a corer into the center of the board and using it in the upright position.

KITCHEN AIDS

A soft plastic clothes sprinkler filled with liquid detergent makes a good soap dispenser for the kitchen. There is no need to remove a cap from the soap can each time. It cannot spill when tipped over, it is easy to hold in the hand, and one squeeze on the clothes sprinkler provides just the right amount of detergent for the dish pan.

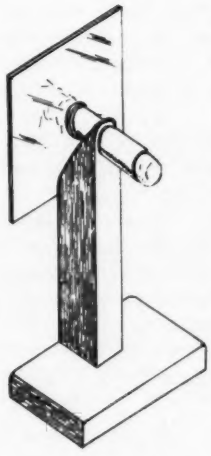


Figure 4

A large aluminum salt shaker with a cup handle may be used for a cleansing powder dispenser. It is light to lift and the cup handle provides an easy grip on the container.

A good non-splash, non-spill method of transporting water from sink to stove while cooking is to use any type of whistling tea kettle with a covered spout which is opened by a trigger under the handle. Vegetables may be prepared and put on the stove in a cooking pan and water added from the tea kettle.

A small table, wheel chair height, with easy-roll casters on the legs and a small one quarter inch rim built around the top of the table is very convenient for the mixing bowl or the electric skillet. It may be used to carry dishes. The Edlund can opener, Number 30, can be mounted to the same table so that a major portion of food preparation can be done in one place.

DRESSING AND PERSONAL HYGIENE

If the preferred brand of toothpaste does not have the new type of large cap, the contents of the tube can be squeezed into a cold cream jar.

More convenient napkin holders on a sanitary belt can replace the keepers usually used (Figure 3). Two pieces, about four inches long, can be cut from a metal clothes hanger and bent, with a pliers, into a circle with the ends meeting. Half-way down the side of each circle, the sides should be brought together, keeping the top side in a straight line, so the bottom half forms a prong with the sides touching. The napkin ends are inserted into the top half and pulled down securely between the edges of the prong.

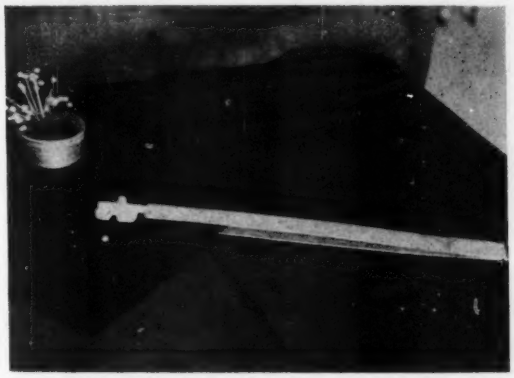


Figure 5

A long handled button hook assists in buttoning shirts, blouses and other wearing apparel. These may be found at any Goodwill or Salvation Army store or may be improvised from wire coat hangers.

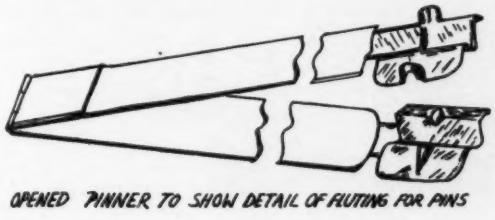


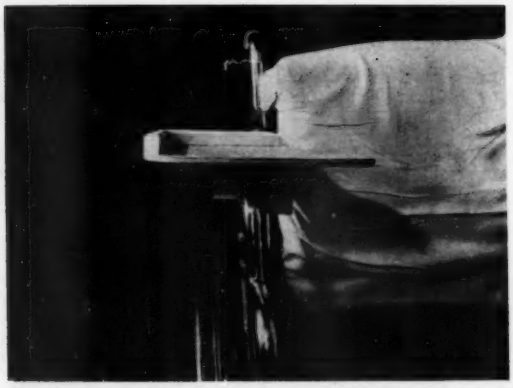
Figure 6

A lipstick holder, which may be clamped to a table, can be made using one piece of plywood, one inch thick and six inches square for the base (Figure 4). One piece of wood, two inches by two inches by twelve inches, is fastened in an upright position in the center of the square board. One inch from the top of the upright stick, a hole is drilled large enough to

(*Continued on page* 69)

THE WHEEL CHAIR SIDE-BOARD

JOSEPHINE C. MOORE, O.T.R.*
IRENE CHAMPAGNE



The Side Board in Position

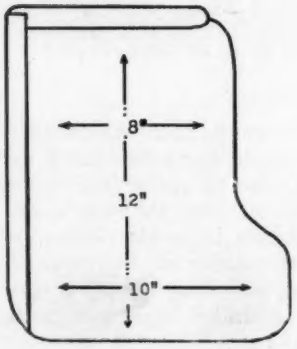
Miss Champagne, a paraplegic of long standing, needed some device that would enable her to work the foot controls of her new sewing machine with her elbow so that she might free her hands for use in sewing. It was necessary that this device enable her not only to use the arms of her wheel chair for balance and sitting support, but also allow her to work the controls with her elbow. This would mean that by merely depressing the buttons or levers of the foot control with the tip of her elbow or olecranon process, she could control the speed of her machine. We decided that a small tray, on which the foot pedal could rest, and in turn, on which her arm and elbow could rest for both support and for manipulation of the controls, would offer the best solution.

From this suggestion the wheel chair "side board" was developed. Made out of scrap pieces of one-quarter inch fir plywood, pieces of one inch by two inches and two inches by four inches white pine, it cost nothing. It took about one hour (or less) to make. The surface is cut out and shaped to conform to the contour of her abdomen, yet it does not quite touch it, as she has no sensation in this area and would not be able to tell if it were rubbing or not. A lip of one inch by two inches white pine was fitted at the back and side, so that the foot pedal could not slip off. The bottom pieces were cut to conform with the contour of the padded arm rest of the wheel chair. The side board then slips snuggly onto this arm rest and holds by friction. The foot pedal is then placed on the side board tray, nestling into the corner of the two lips or sides. This positions it so that Miss Champagne can manipulate the buttons with her elbow, yet it still enables her to use her forearm for sitting balance, and her hands for sewing.

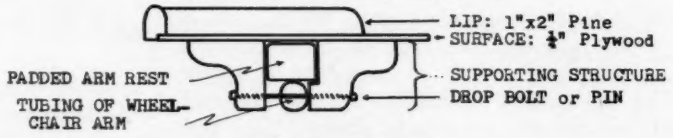
One additional feature is a small drop bolt or pin that slips through both pieces of support-wood, and through small holes drilled into the tubing of the arm piece of the wheel chair. This enables the side board to be positioned and secured in any desired range forward or backward. It also eliminates sideward tilting. The side board does not protrude forward, so the user can wheel up to the edge of the table or desk, or sideways so that it is possible to go through a doorway with it attached.

The side board has proven to be extremely successful. Since its inception we have found many other uses for it, such as a "TV" tray for a coffee pot and cup; holding a book on a small reading stand; a writing board, etc. In all, it is lighter and easier to handle and store than a large lap board. It has become a useful part of everyday living to Miss Champagne.

*Instructor in occupational therapy, Rackham School of Special Education, Eastern Michigan College, Ypsilanti, Michigan.



THE WHEEL CHAIR SIDE-BOARD

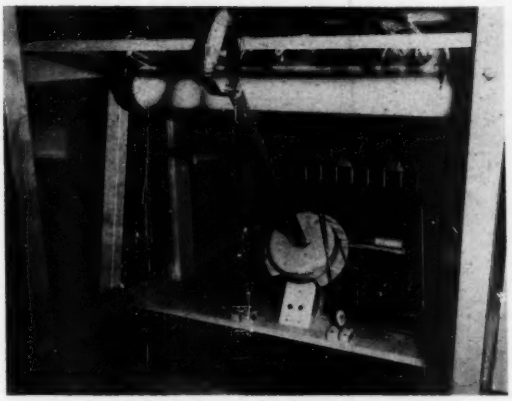


APPROXIMATE SIZE

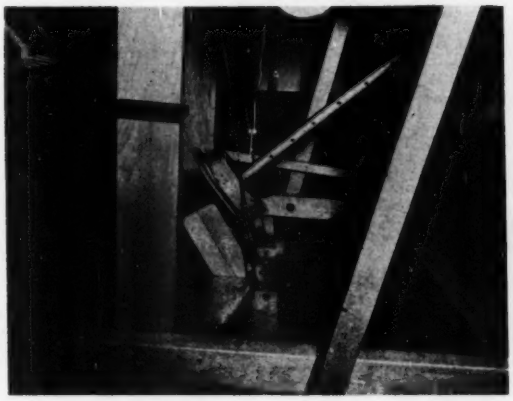
SURFACE: ¼"x12" Fir Plywood
LIP: 1"x2" White Pine rabbeted in, then glued and screwed into place.
SUPPORTING STRUCTURE: 2"x4" or similar thickness of wood. Can be made from several pieces (as original "side-board" was) or sawed from one solid piece as drawing indicates. Glued and screwed into surface.
DROP BOLT: ⅛"x6" Toggle or Stove Bolt.
FINISH: All edges and corners rounded, sanded and varnished.

SUPINATION AND PRONATION ON A FLOOR LOOM

NORMA LEARNED, Captain, A.M.S.C.*



An adaptation for obtaining supination and pronation on a floor loom.



Side View of the Adaptation

The existing methods of occupational therapy employed in the treatment of physical disability of patients requiring effective supination and pronation, while effective in obtaining results, are not as varied in activity range as is desired to offer sustained interest while employing a repetitious motion. These methods have been relegated, by their nature, to an insignificant facet of the operation that has failed to capture and retain patient interest.

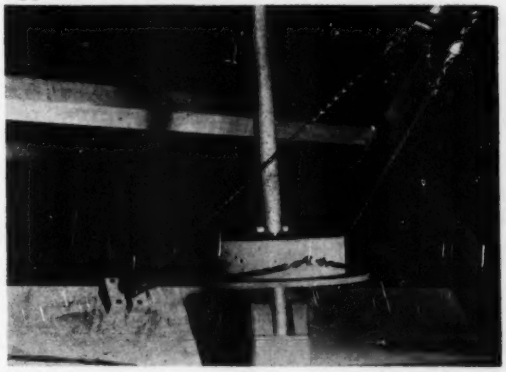
The effort to obtain the desired end should be directed toward a method of treatment that is at once standard and popular. Weaving fills these requirements more satisfactorily than the numerous other standard methods available. The floor loom may be easily adapted to provide a method of obtaining supination and pronation that permeates the full course of activity and retains patient interest.

Construction: Any size floor loom that has been reduced to a two harness loom may be used. Treadles and lams are removed and adaptation is attached as a permanent part.

The base of the adaptation is bolted to the underside of the two bottom cross beams between the ends of the beater and the upright side beams. (See photographs.) To the center of this is attached the support for the distal end of the handle. This is constructed from two boards, two inches by four inches with a slot cut in the top of one for holding the handle. The two pieces are put together to form a board four inches by four inches with the bottom cut at an angle. Two swivel pulleys are attached forward and to each side of the center support. The above is all one unit that can be easily removed.

The handle consists of a pipe with a stirrup handpiece, similar to the extension handle on a printing press. A wooden wheel with three screw eyes is attached at the distal end.

A bar is attached below the breast beam to the two cross beams and front corner posts for support of the handle.



Rear View of the Adaptation

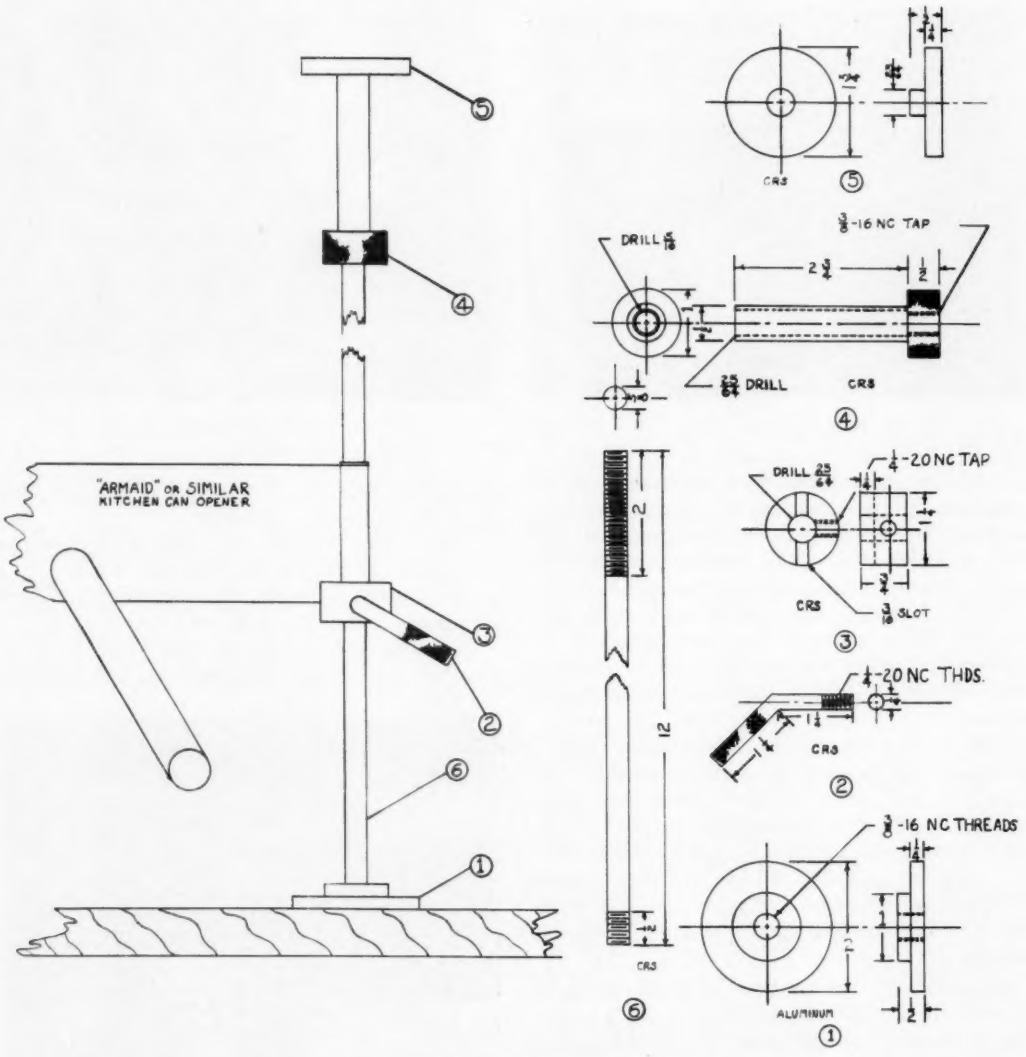
The distal end of the handle rests in the slot, and the proximal end is held by a piece of leather thong to the bar in front. Two pieces of chain with swivel spring snaps on one end are hooked to eyelets on the harness, run through the pulleys, and connected to the screw eye on the wheel.

Operation: The patient sits on a standard weaving bench in a comfortable position to turn the

(*Continued on page 76*)

A WORKABLE ONE-HANDED CAN OPENER

JAMES K. BROCK*
JUDITH STEMPER, O.T.R.†

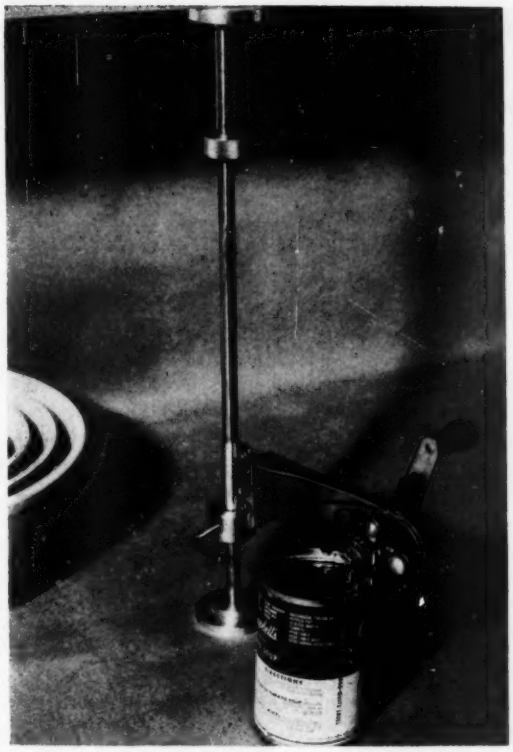


A Drawing of the One-handed Can Opener

A problem that has continually confronted occupational therapists and others working with homemakers limited to the use of only one hand is that of adapting a suitable can opener. The accompanying photograph and drawing graphically show how the Curative Workshop of Milwaukee, Inc. has solved this problem.

The adaptation has been made specifically for the Armaid can opener (Steel Products Mfg. Co., St. Louis, Missouri) but is easily adapted to most other similarly manufactured can openers. The adaptation permits either right or left hand operation. This adaptation is made to be placed on the kitchen counter between the counter top and

*Supervisor of vocational department, Curative Workshop of Milwaukee, Inc., Milwaukee, Wisconsin.
†Occupational therapist, Curative Workshop of Milwaukee, Inc.



The Can Opener in Operation

the underneath side of the kitchen wall cabinet. However, by varying the design slightly, it may be adapted to fasten against a wall adjacent to any counter. As shown in Figure I, Part 6 of the adaptation must be slightly shorter than the distance between the cabinet and the counter top and is threaded to permit Part 4 to be used as an adjustable clamp to hold the device in position. This clamp easily attains sufficient pressure to permit use of the can opener without fastening it with a screw.

Operation of the can opener is relatively simple if instructions are carefully followed. Part 3 should be dropped to a point below the top of the can to be opened. The can is then slipped into the cutting head of the opener and securely locked into position for opening. Then Part 3 is raised and clamped into position to securely hold the can to be opened and keep it from swinging from right to left. If the can is not of sufficient height to permit swinging clearance of the can opener crank it is recommended that a small block of appropriate size be placed under the can.

This adaptation has been used by therapists in the Curative Workshop's special Homemaking Laboratory for housewives and has been found to be most satisfactory.

Self-help Adaptations . . .

(*Continued from page 65*)

hold a tube of lipstick. A small mirror is fastened to the back. The lipstick is applied by putting the mouth against the tube of the lipstick.

SEWING

Pinning patterns to material can be done easily and without danger with a special device (Figures 5 and 6). Two strips of twelve gauge sheet metal, one inch by fourteen inches, are hinged together. The open ends are fluted and a small trough, connecting the fluting, is made on one side only. One strip goes under the material, the other over; the arm, pressing the metal strips, holds them together while pinning. Florists' pins are suggested for pinning.

GENERAL HOUSEHOLD

By cutting the toe from a man's sock and pulling on the arm, with elbow in the heel, the sock prevents burning the arm while ironing.

Making a bed. Sitting at the head end of a bed, the blankets can be arranged and straightened to the middle of the bed. Then the body can be eased over onto the made-up end of the bed, the rest of the blankets straightened and the pillows arranged at the head. By sliding off the end of the bed into the wheel chair, and giving the bedspread a few pulls here and there, the bed is made.

Waxing a floor. The floor may be waxed while sitting in a wheelchair with the aid of a floor waxer with a long handle and a cup of liquid wax. These can be purchased at a local market for a very nominal price. The cup is filled with liquid wax and the waxer used as though wiping up the floor.

REFERENCE

1. The authors are grateful to students of the adapted equipment class at the University of Southern California who suggested and made some of the adapted equipment.

Case History

SPOON FOR ARTHROGRYPOSIS PATIENT

STANLEY S. ATKINS, M. D.*
BEVERLEY J. GAINES, O.T.R.†

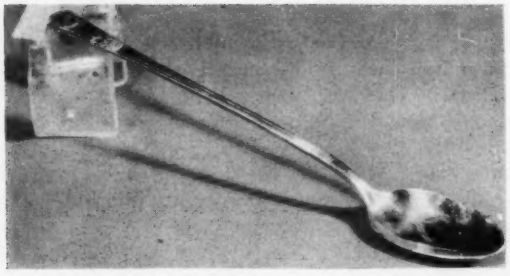


Figure 1

An eight year old boy with arthrogryposis multiforme congenita was referred to occupational therapy for feeding training. The patient had the following motions in the left arm, which was the more mobile and the preferred: shoulder flexion and abduction—fair; shoulder rotation—slight; opposition of third and fifth fingers; flexion and adduction of thumb. There were no motions in the elbow or wrist.

By combining his limited arm motions with neck and trunk motions, this child had learned to write and to propel a wheelchair. In teaching the child to feed himself, it seemed practical to utilize the same combination of motions.

A spoon, as described below, was made for the patient (figure 1). He received individual instruction in feeding for about two weeks, after which he was enrolled in a "lunch club" program in occupational therapy for hospital patients who have feeding problems. He at first required assistance in getting the food on his spoon, but after about three months, needed help only in cutting the food (figures 2 to 4). He has learned to take off and put on the spoon by grasping the spoon in his teeth and maneuvering the arm band into place. He was allowed to take the spoon home for Christmas and takes it home for weekends. It is felt that he needs additional practice before feeding himself in the hospital ward in a large group, but it is hoped that he can graduate to the next step soon.

Description: An arm band of plexiglass was shaped to the patient's arm and several holes were drilled for ventilation. A silver-plated iced tea spoon was riveted to the arm band. In setting the rivet, the bur was intentionally left loose so that the spoon could swivel. The end of the rivet was flattened sufficiently to keep the bur from coming off. A small block of wood was glued to the arm band, to act as a stop for the spoon. To pick food up, the patient lowers his arm and rotates it internally. To get the food to his mouth, he raises and externally rotates the arm, while at the same time he brings his head forward to get the food into his mouth.

Figure 2

Figure 3

Figure 4

Discussion: The construction of the spoon is simple, but it has proved to be sturdy. With further experimentation, it could probably be improved in appearance and strength. It has helped to solve an unusual feeding problem. It should be added that the effectiveness of the spoon is dependent to a degree upon the seating of the patient. Unless his arms are elevated to the height shown in the picture, he is not able to get the proper leverage.

*Asheville Orthopedic Hospital, Asheville, N. C.
Pictures courtesy of Allan of Asheville, Photographer.

NATIONALLY SPEAKING

From the President

In my last message to you I wrote of our national conference and urged you all to endeavor to attend it as frequently as possible in order that you may experience the stimulation of meeting many other occupational therapists and may learn, work and play with them for the healthy development of our profession.

The conference is one of the major functions of our National Association, its primary purpose being to afford the general membership chance to participate in the affairs of the profession and to become acquainted with the national officers. Since the beginning of the organization the conference has never been held in the same place for two consecutive years but has moved from east to west, north to south in order that, at relatively frequent intervals, opportunity may be given for varied groups to attend. Mid-year meetings are always held in the middle west.

From 1918 to 1941 there were only five schools in the country: Boston, Milwaukee, Kalamazoo (Western Michigan), Philadelphia and St. Louis (Washington University.) Development of occupational therapy departments and schools was relatively slow until the sudden mushroom growth began in 1941 with the opening of courses in Columbia, New York University, Eastern Michigan State and Mount Mary. Since that time we have grown rapidly to our present total of thirty courses with several colleges or universities planning to inaugurate new curricula. The Educational Council and the Board of Management have made every effort to encourage geographic distribution of schools so that growth throughout the country might be stimulated. This has helped to increase the number of occupational therapists in the midwest, far west and south.

I wish that all of you might have seen the documentary (another magnificent job done by Wilma West) presented at the New York conference. It graphically portrayed the organization and development of the American Occupational Therapy Association and brought its history vividly to life. We all laughed at the scene showing an early meeting of the Board when the treasurer reported that the expenditure for the year had been $125.00. Mrs. Eleanor Clarke Slagle, our first executive director, managed the affairs of the association from her house and her office as director of occupational therapy for New York State. Hers was in large measure a contribution of devoted effort and time with no regard for financial remuneration for she served without salary and largely at her own expense for nearly twenty years. When the Association acquired a paid executive director in 1937 it was operating on a budget of approximately $7000 total annual expense.

The history of our Association is interesting but more important is the fact that each of us has a part and a responsibility in its operation. Our strength lies, just as does that of our American way of life, in the active participation of as many of our members as possible.

In order that the participation may be as complete and as intelligent as possible we should be thoroughly conversant with the mechanism of our association.

A House of Delegates was established early in the organization in order to provide direct contact with the state associations. It, however, did not function adequately and was disbanded. In 1938 it was reconstituted with fourteen state associations as members. One of the duties of the House is the election of the chairman of the nominating committee of the Association. The constitution states "The chairman will appoint his own committee of no less than four members other than himself. The chairman may be a member of the House of Delegates but may not be manager or an officer of the Association. Three of the committee members so appointed by the chairman shall be chosen from the Board of Managers and the remaining committee members shall be from the membership at large and shall not be a manager or officer." The committee obtains from the state associations nominations for the vacancies to be filled. A double slate is made up from the names reported by the delegates and this is voted upon by the total membership. Unfortunately, only approximately 50% of the membership return their ballots. This, however, is somewhat above the average for most organizations which use this democratic procedure. (Witness our city, state and national elections or any club to which you belong.)

There is also a tendency to re-elect the same persons usually because they are relatively well known and are willing to do the work and assume the responsibility of office. No person, however, is ever permitted to serve more than two consecutive terms with the exception of the treasurer.

It is, however, obvious that by this procedure there can be no self-perpetuation on the Board of Management. Elections are in the hands of the membership and it is they—you in fact—who

are responsible for the election of the persons whom you wish to govern your affairs.

The Board of Management, to quote the constitution, "shall consist of twenty-three persons, namely the four officers of the Association (President, First and Second Vice-President and Treasurer): six members of the House of Delegates and thirteen other persons, eight of whom shall have been active members of the Association for one year previous to election. The other five may be active therapists who have been active members for one year, or Fellows. Those board members other than the officers and the six members from the House of Delegates shall be elected by the membership for a three-year period, and no person shall serve more than two consecutive terms. Four shall be retired one year, four the following year, and five every third year."

This arrangement obviously provides for rotation of office on the Board and insures representation through the House of Delegates as well as from the membership at large. Stability is maintained by experienced persons who are elected or re-elected by the Association. New members come in each year to gain experience and to become conversant with the problems of the profession. Reports of the decisions and actions of the Board are made to the House of Delegates and, through publication in the *American Journal of Occupational Therapy,* to all occupational therapists.

In the next issue of the Journal, I shall present to you further facts about the organization and function of the American Occupational Therapy Association. In the meantime I hope that many of you may find time to read the constitution so that you may be conversant with the rules and regulations under which the Association operates.

Helen S. Willard, O.T.R.
President

From the Executive Director

We are operating today in a world of narrowing perimeters and, at the same time, expanding horizons. As a profession in the health field we should be proud of the role being demanded of us and the participation and contribution we are constantly being called upon to give. World events are moving rapidly. The only way we can hope to fulfill our role is to be as well informed as possible; it becomes one of our obligations as a mature profession. Therefore, I wish to convey to you the highlights of two recent internationally-flavored meetings of current interest and concern to us.

It is not only one of the functions of our national Association to serve effectively as a participating agency, but it also involves, for each member whom the American Occupational Therapy Association serves, an awareness and keenness on his part of the benefits to be derived and to be given. Our own domestic front in occupational therapy is swiftly paced these days for all therapists, both in education and practice, with the shifting emphasis in treatment programs and technical advancement. This takes the best each of us has to give of scientific knowledge and administrative skill.

Threading through all of this is our participation on the expanding world front. Our response to this is evidenced in the handling of the ever-mounting numbers of inquiries, questions, and visitations from foreign personnel; arrangements for exchange visitors in your institutions, for observation or securing further technical training; Fulbright and Atlantique awards to OTR's; United Nations and World Health Organization appointments; the American Occupational Therapy Association as a participating agency with the International Cooperation Administration Traineeship Plan for Foreign Technicians; establishment of the international committee, a new AOTA standing committee; a steadily growing number of names of foreign OTR's listed in the annual publication of the Yearbook; the role of the World Federation of Occupational Therapists as one of the world organizations interested in the handicapped.

I will refer, first, to the meeting called by the National Health Council of which the American Occupational Therapy Association is a member organization, and the import of which was deemed vital enough that the executive heads of twenty-seven national health agencies met for a full day of discussion. Opportunity was provided to explore with their colleagues in other national organizations questions relating to the international concerns of voluntary health agencies. It seemed wise to initiate exploration of these concerns because of the increasing national interest in international health problems as demonstrated by President Eisenhower's "State of the Union" message, the Administration's offer of research funds to the World Health Organization, the proposals of Senators Hill and Humphrey in the last Congress, as well as the study of international health being undertaken by the Humphrey subcommittee.

Five major points of discussion centered around the following questions and responses which were common to all the agencies. Check your knowledge to see how AOTA stacks up on these:

1. Does the agency have an international program? What staff or committee responsibilities have been identified?

Almost every national health agency is involved in some aspect of international activity. Interest and pressure to become further involved are growing. It is important to distinguish between those international efforts relating strictly to the exchange of scientific and professional information, and those which are designed to promote citizen participation in health activities.

2. Relationships with international organizations in the fields of special interest to the agency.

Extensive work is apparently being done by the various agencies, frequently with very limited resources of funds and staff time.

3. Relationships with counterpart organizations in other countries.

There is general recognition on the part of national health agencies of responsibility in building up counterpart organizations abroad, with generous dissemination of United States materials to such organizations.

4. Responsibilities for international visitors.

All agencies reported contact with visitors from abroad, referred through the World Health Organization, the International Cooperation Administration, the State Department, or others. It is felt much more can be done in dealing with foreign visitors to assist them in drawing from their experience that which is applicable to their own countries.

It was agreed: (a) that there is growing realization of the need for national health agencies to stimulate greater interest and activity on the part of their constituencies in matters relating to international health, (b) that there is need for further exchange of ideas and experience among the agencies, together with realization that the American agencies have much to learn from foreign experience, (c) that it is important to attempt to prepare a document which will summarize the involvement of U. S. agencies in world organizations and to describe the relationships which exist with such organizations.

The afternoon section of the National Health Council meeting comprised progress reports on current projects of worldwide scope and clearly reflected the necessary and anticipated role of voluntary agencies. These presentations were made by:

1. Mr. Julius Cahn, Director of the Senate study headed by Senator Humphrey, pursuing a study of international health systems, research, and rehabilitation programs, the first step of which is a compilation of facts requested through correspondence and interviews. The American Occupational Therapy Association has contributed to this. An interim report of the Humphrey subcommittee is expected soon. This is the committee which is proposing establishment of a National Institute of International Medical Research which would add a new institute of health to those currently existing.

2. Dr. H. Van Zile Hyde, Assistant Surgeon-General for International Health, commented on new developments in planning World Health Organization and U.S. international health programs. He signified that considerable attention is being given to proposed International Health and Medical Research Year (introduced in Humphrey bill).

3. Dr. Howard Rusk, New York University-Bellevue Medical Center, spoke in support of the recently organized Citizens' Committee for Health and Peace which endorses Senator Lister Hill's re-introduction of his "Health for Peace" legislation. Reprints of the Congressional Record will be mailed to AOTA members in the near future, describing this Rehabilitation Bill of 1959, S. 772.

All the above programs can strengthen the work of voluntary agencies such as ours. For instance, the funds proposed in the Hill bill will be used primarily for support of demonstrations and research. Voluntary agencies are free to submit proposals in these areas.

The other meeting, illustrative of joint global endeavor, was the first Pan-Pacific Conference on Rehabilitation, sponsored by the International Society for the Welfare of Cripples, the Australian Advisory Council for the Physically Handicapped, and the New Zealand Society for Crippled Children, on behalf of the Pacific and East Asian nations. This meeting, convened in Sydney, Australia, is one of a series of world regional meetings. With the theme, "Conquering Physical Handicaps," the meeting was a splendid example of communications in the valuable exchange of ideas among 1000 persons from 16 nations. Among those present were delegates from Australia, Burma, Ceylon, Fiji, Korea, Hong Kong, Malaya, New Zealand, Pakistan, the Philippines, South Africa, Thailand, the United Kingdom, and the United States.

It was my privilege to be a guest participant representing occupational therapy. The several interrelated professional disciplines present concentrated on the conference content which dealt with subjects of common universal interest including recent advances in medical techniques and treatment programs, community attitudes toward the disabled, social work, special education, prevocational evaluation, vocational training, and employment of the disabled. Each day ten to twelve scientific sessions were held, covering every specialized aspect of rehabilitation. Demonstrations and clinics were arranged as field sessions at many of the local hospitals and rehabilitation centers.

Outstanding among the conference attractions was the exhibit of aids for the disabled, organized by the Australian Red Cross Society in conjunction with the conference committee. Held in one of Sydney's large department stores where it was available to the public as well as to conference participants, it comprised twenty-one ex-

hibits demonstrating the wide development of appliances used today for self-help and independence of the disabled. Outstanding were those dealing with prosthetic devices, aids for the homemaker, and adaptive tools used in railroad work by amputees. The latter was an exhibit from the industrial occupational therapy unit of the department of railways of the state of New South Wales.

It was gratifying to note the recognition and role accorded to occupational therapy throughout the program and the reference made to it by participants from the many countries represented. Four occupational therapists gave papers either at a principal session (general assembly) or in the multiple concurrent sessions. Occupational therapy programs were prominent in each of the clinical and demonstration sessions held in the hospitals and centers. One evening of the five-day conference was devoted to professional asssociation meetings hosted by the respective Australian associations. This meant concurrent gatherings of the British Medical Association, British Surgical Technicians, and the Australian associations of social workers, physical therapists, occupational therapists, speech therapists, nurses, and hospital school teachers. Appropriate to the theme of this article is the work which the Australian occupational therapists are doing in the development of their federal body (the equivalent of the AOTA). Australia is an active member-country of the World Federation of Occupational Therapists, and they are finding need for expanded structure of their national organization.

Proceedings of the Pan-Pacific conference will be available soon at $1.50 a copy. Orders can be placed with the International Society for the Welfare of Cripples, New York. Several copies will be available on loan from the AOTA headquarters for interested members.

Let us each, from our particular vantage point as occupational therapists, look to the significance of health as a tool toward international understanding, and let us join those forces at work in the world in looking for the best ways and means of implementation, whether it be learning more about occupational therapy in other countries, by joining the World Federation of Occupational Therapists as a U. S. member, receiving foreign exchange visitors, serving on the AOTA international committee, participating in plans for the 1960 World Congress of the International Society for the Welfare of Cripples or the 1962 WFOT congress, both convening in the United States; whether it be local participation in the 1960 World Mental Health Year, or keeping abreast of legislation.

These are not matters remote and detached from any of us, but rather can give each of us additional motivation and stimulation in our daily capacities as members of a recognized health profession concerned with improved patient care and professional standard.

Marjorie Fish, O.T.R.
Executive Director

Editorial

THE TENDER TRAPS OF MARRIAGE AND HISTORY

Let us not delude ourselves. Occupational therapy is essentially a woman's profession. As such it gains certain advantages, but there is also a price that must be paid for the distinction. It is the price that nature demands as a result of the effort to blend professionalism with marriage and family rearing.

A few historical aspects of professional nursing illustrate this. The profession was born of strife in the Crimea. The shaping forces attending that birth and subsequent related events were so strong that the picture of the nurse as a woman persists unchanged to this day. This is so despite the profession's attempts to modify the picture as a result of its recognizing the accident of history as the only justification for the continued exclusiveness.

Now after many years during which nursing has been generally considered as being off-limits to men, the profession is plagued by recruitment demands which exact a great price in being met. Over the years, during which sporadic and spasmodic attempts were made to enlist more than just token numbers of men in nursing, the effects of precedent, vested interests, thinking patterns, and sheer weight of numbers gradually coalesced and suddenly crystallized into an unyielding mass. The plasticity was gone and with it the possibility of making any significant change in the familiar pattern of female pre-emption. As a result, literally hundreds of thousands of women have left nursing for marriage only to be replaced, at considerable expense to the profession, by hundreds of thousands of others who will also leave.

We are concerned about this particular pattern of the past, of course, for we see reflected in it our own historical picture and a portent of our future. Our profession was cradled in a war, its birth an accident of history. The present picture of the occupational therapist is that of a devoted woman. We, too, are establishing precedents, influencing vested interests, shaping attitudes. We, too, are losing to marriage an unthinkable number of therapists—last year the rate was almost three

out of every five. Despite our awareness of the expense of replacing them and trying to expand at the same time, we are apparently beginning to indulge ourselves in the extravagant attitude of viewing the professional implications of marriage as a necessary evil.

Think of the implications of these losses: drop-out partially negates and thus makes wasteful all our recruitment efforts; it contributes to the splintering of the profession; it necessitates pressing financial adjustments within the Association; it contributes to the need for refresher courses and special short courses in occupational therapy; it is a factor in decisions to train persons already qualified in skills; it influences decisions regarding combining occupational therapy and physical therapy courses; it eventually robs us of time and energy which could be more profitably devoted to research, education and patient welfare.

We are not so naive nor sanguine as to anticipate that women will forego marriage for the sake of reducing drop-out; therefore, we desperately need now, early in our history, some factor which will reduce or offset the effects of our losses—some stabilizing factor.

The most stable agent in the entire labor picture is the married man with family obligations, for that man must stick to his job. Such a man or one who contemplates marriage is the most likely stabilizing labor factor we can hope for to reduce our drop-out. But needing and wanting are two different things. We need male therapists, but do we want them?

It is quite difficult to draw an unequivocal conclusion from our paradoxical conduct, for when men within our own profession have suggested unifying their efforts, ostensibly for the purpose of eventually attracting more males to us, we have looked at them a little obliquely, perhaps a little suspiciously, and have dissuaded them. At the same time, however, we have buoyed our optimism so that now, in writing about our profession, we use the impersonal "he and him," although there are still ninety-six women in every one hundred of us.

We say that the profession wants men, and we accept them in our schools, but our advertising and recruitment materials have been keyed to the young woman, primarily.

We say we want men, but we have failed utterly to manifest any unmistakable, outspoken and official expression regarding his position in our profession.

We are not anti-male therapist; neither are we pro-male therapist. At best we are non-deferential. Though there are some hopeful enough to regard this mere lack of deference as a giant step forward, one wonders whether this alone is, in and of itself, timely enough or sufficient to produce any significant change in the percentage of male students attracted to our ranks.

If, from a professional point of view, we are genuinely concerned about side-stepping these tender traps of marriage and history, we may take hope in our now relative small membership, our professional youthfulness, our pliability, and our willingness to learn from our experience and that of others. If we are to succeed in fully exploiting these assets, we must act now. First, we must encourage the establishment on the national level of a firm, clearly defined, official and positive policy regarding the position of men in our profession. Second, we must cease to view the male therapist as a threat to the citadel of women's rights. We must accept him for what he has to offer: a certain professional stability and a distinctive cultural inheritance which we can and must exploit to draw him to our ranks. Third, we must pervade *every aspect* of our public relations with almost aggressive zeal and unending professional allurement for potential male therapists. At the same time we must maintain our attraction for young women.

Regardless of our personal reactions to the predicament in which we find ourselves, there is no doubt about its seriousness. Humorously, though, it reminds us of what the Queen once said to Alice:

"Well, in *our* country," said Alice, still panting a little, "you'd generally get somewhere else—if you ran very fast for a long time as we've been doing."

"A slow sort of country!" said the Queen. "Now, *here,* you see, it takes all the running *you* can do, to keep in the same place. If you want to get somewhere else, you must run twice as fast as that."

—Frank W. Jackson, O.T.R.
Veterans Administration Hospital
American Lake, Washington.

Supination and Pronation . . .

(*Continued from page 67*)

handle to the left or right. Toe pressure on the wheel holds the shed open and both hands are free.

For more range of motion in either supination or pronation, three screw eyes are added to the wheel: one at the top which will start the action from mid-position, one on each side which will start the action with either more supination or more pronation. Simply rotate the handle and reattach the chain.

A large wheel is used so the shed can be opened in one motion. A small furnace chain is used because of the strain. It is strong, will not stretch, and is flexible. A larger retaining wheel is added to back of wheel to keep chain from slipping off the back.

Conclusions: A device has been attached to a floor loom for obtaining supination and pronation. The adaptation is basically simple and becomes a permanent part of the loom.

The activity will generally hold a man's interest, action is carried through the complete project, and the range of motion obtained can be varied.

*U. S. Army Hospital, Ft. Carson, Colorado.

THIRD COUNCIL MEETING
WORLD FEDERATION OF OCCUPATIONAL THERAPISTS

Copenhagen, Denmark, 1958

Officers

President: Clare Spackman
First vice-president: Ingrid Pahlsson
Second vice-president: Dulcie Goode
Hon. secretary-treasurer: Mrs. Glyn Owens
Hon. assistant secretary-treasurer: Mrs. Thelma Cardwell

Delegates

Australia: Dulcie Goode
Canada: Mrs. Thelma Cardwell
Denmark: Mrs. Elizabeth Sturup
Great Britain: Grizel MacCaul
India: Mrs. Kamala Nimbkar
Israel: Mrs. Meyers Cantor
New Zealand: Margaret Bamford
South Africa: Mrs. Jean Hart
Sweden: Helena Kugelberg
United States of America: Marie Louise Franciscus
Germany (observer): Mrs. Annemarie Boll
Norway (observer): Mrs. Vivi Sogaard Lyostad

Election of officers and committee chairmen. A letter of resignation was received from the honorary secretary-treasurer, Mrs. Glyn Owens. From the beginning Mrs. Owens has worked untiringly and her enthusiasm and foresight during the formative years have contributed greatly to the Federation. It was with great regret that the resignation was accepted.

There was not an election for the office of president as Miss Spackman's term of office is not completed. The following were elected:

First vice-president: Dulcie Goode
Second vice-president: Grizel MacCaul
Hon. secretary-treasurer: Mrs. Thelma Cardwell
Hon. Assistant secretary-treasurer: Mrs. Glyn Owens
Chairman, international relations committee: Margaret Fulton (Gr. Br.)
Chairman, membership committee: Mrs. Thelma Cardwell
Chairman, education committee: Helen Willard (U.S.A.)
Chairman, legislative committee: Grizel MacCaul
Chairman, congress committee: Marie Louise Franciscus
Chairman, publications committee: Mrs. L. C. Smith (Canada)

Fellowships. The following distinguished friends of the profession have been elected advisory fellows of the World Federation of Occupational Therapists:

Countess Estelle Bernadotte, Sweden
Dr. Henry Kessler, U.S.A.
Miss Mary Switzer, U.S.A.
Dr. Howard Rusk, U.S.A.

Recognitions and awards. The following honors to members of the Council were reported: Miss G. P. MacCaul, Great Britain, was made a member of the Order of the British Empire in 1957.

Miss Marjorie Fish, U.S.A., has been appointed to the expert advisory panel on rehabilitation of the World Health Organization.

Mrs. Glyn Owens, Great Britain, has been made an honorary member for life of the Scottish Association of Occupational Therapists.

Mrs. Kamala Nimbkar, India, has had the distinction of being appointed representative of the government of India, Ministry of Health, to the South East Asia and the Far East seminar on rehabilitation, Solo, Indonesia, August, 1957.

Representation on international organizations. According to the decision made at the 1956 Council meeting, re-application for official relations with the World Health Organization as a non-governmental organization has been submitted.

Miss Spackman and Miss Fish represented the Federation at a meeting in New York at the conference of the World Organizations Interested in the Handicapped.

In consequence of the invitation from the International Society for the Welfare of Cripples to organize a sectional meeting at the seventh Congress in London, England, on July 23, 1957, the Joint Council of Associations of Occupational Therapists in Great Britain, on behalf of the World Federation, arranged a luncheon meeting at St. Thomas' Hospital.

Study tour and weaving course. Forty-four members registered for the pre-congress study tour in England, from July 30 to August 5, which was arranged by the joint council of the Associations of Occupational Therapists in Great Britain, on behalf of the World Federation. The varied program of hospital visits and discussions provided a stimulating and successful course.

Publications. The constitution with recent alterations has been printed and distributed to all member organizations.

A small folder on the objectives of the World Federation was published and made available for distribution in July, 1957.

The publications "The Establishment of a Programme for the Education of Occupational Therapists" and the "Organization of an Occupational Therapy Department" have been available for distribution since June, 1958. A page on the "Function of Occupational Therapy" is now available. These publications are being translated into French and Spanish.

Further publications in the process of completion are: "The Organization of a Professional Association" and "Professional Ethics."

A standing committee on publications was formed to be responsible for the production of official publications of the Federation as approved or requested by the Council.

Finance. There has been slow progress toward a stable financial position. The publications of the Federation during the past two years have been expensive to produce and the production of further publications as planned will increase the expenses. Other plans for the expansion of activities of the Federation have been curtailed due to lack of funds. Although the donations of member organizations have aided greatly, the response to the appeal for financial support was not as good as hoped.

The financial responsibility of conducting courses and meetings, other than congresses was discussed and it was agreed that in the event of a member organization, a designated group, or an individual accepting responsibility for the organization of study courses or meetings on behalf of the Federation, the financial responsibility shall rest with the organization, designated group or individual.

Individual member's privileges. It was reported that there are 435 individual members of the Federation and it is estimated that the total membership in occupational therapy associations is 9,000. There exists, therefore, a large reservoir of occupational therapists whose interest and support should be sought. Careful consideration and discussion were given to this matter and to the means of maintaining the interest of members. During the discussion it was pointed out that the main privilege through membership is the satisfaction of participating in the enlargement and advancement of our profession. In addition, all members will receive copies of the proceedings of the second congress.

Expert advisor. In view of requests which have been received from the World Health Organization and the United Nations it was deemed advisable that qualifications for an expert advisor in occupational therapy be drawn up. This has been completed and will be circulated to those organizations requiring the information.

Literary material available for exchange or loan. It was reported that the response to requests for lists of material from the member organizations indicated a scarcity of material available. It was agreed that there is a real need for the material but discussion indicated that the need must be met at the national level before further attempts are made at compiling a list at the international level.

Education. It was reported that as nearly as can be ascertained, there are now 62 schools of occupational therapy in the world as compared to 52 in 1956.

The new school of occupational therapy in Amsterdam, the Netherlands, was accepted as meeting the minimum standards of education of the Federation.

A questionnaire, based on the minimum standards of education, is to be sent to all member organizations asking for data in regard to the present status of their schools as compared with the standards. The committee on education will review the reports and make recommendations for strengthening or revising programs of individual schools.

It was suggested that new schools should keep the national association in that country informed of their development in order to secure the standard of schools.

Newsletter. As a means of maintaining contact between meetings of the Federation, a brief newsletter is to be sent to each member organization in January of each year. The organization is to send the letter to each individual member with the annual bill for fees.

Occupational therapy exhibit. It was agreed that there is a need for a permanent exhibit on occupational therapy which the Federation would have available for meetings of other international organizations. Planning such an exhibit is to begin immediately. The initial step will be the collection of colored slides and glossy prints depicting aspects of treatment.

Reciprocity. Clarification of the term "reciprocity" was requested and it was agreed that reciprocity implies an exchange of such rights and privileges as are mutually agreed upon by the negotiating parties.

It is desirable that a member organization of the Federation should establish mutual reciprocity upon recognition of the educational standards. It is recognized that national government restrictions may limit opportunities for employment in spite of reciprocal relations within the Federation.

International recognition of qualifications. All schools approved by a member organization are accepted as meeting the minimum standards of education as set down by the Federation. Thus, with the acceptance into membership of an association, graduates of the school or schools accredited by that national association would have the same recognition as those from other countries. A person requiring the names of approved schools should write to the national association.

Register of occupational therapists. There is to be established a roster of foreign students and qualified graduates to be obtained from all schools in all countries as well as a roster of occupational therapists working in foreign countries.

Standing orders for congresses. The chairman of the congress committee was empowered to set up a small committee for the purpose of establishing a set of standing orders for congresses as a guide for such meetings.

Appointment of area representatives. In the event of a significant meeting at which it is desirable to present an exhibit, demonstration or program participation, a local occupational therapist is to be appointed by the Federation in consultation with the member country involved, to handle the matter as an official representative of the Federation.

Membership. The following organizations were admitted to membership: The Association of Authorized Occupational Therapists. (Federation Republic of Western Germany.)

The Norwegian Association of Occupational Therapists.

Geographically planned rotation of meetings. It was agreed in principle that long term planning in regard to the location of council meetings and congresses is advisable. A plan for the rotation of meetings during the next fourteen years was recommended. However it was realized that the details of long term planning will be influenced by future developments in occupational therapy, and thus definite plans have been made only for the 1960 Council meeting to be held in Sydney, Australia, in September of that year, and the 1962 congress to be held in Philadelphia, U.S.A., in October. Information in regard to accommodations and travel costs for the Philadelphia congress will be available well in advance so that individual members wishing to attend will be able to do advanced planning.

It was recommended that study courses and visits be arranged in conjunction with the congress.

Mrs. Glyn Owens
Honorary Secretary

Letters to the Editor

To the Editor:

Having thoroughly read the November-December issue of AJOT I am immediately compelled to write you of my reactions to it. I felt it was the most thought provoking issue that I have read in the past seven years, and a publication which can truly be called the "mouthpiece" of a professional organization.

As was so well stated by Mary Reilly, *An Occupational Therapy Curriculum for* 1965, "we are long overdue in joining the trend toward self evaluation." All of the articles in this issue express a comprehensive evaluation of our educational system, and throw out to all occupational therapists an opportunity to look realistically at the problem at hand. This is one step in helping the current population of registered therapists gain insight and to promote maturity within ourselves and our profession. The evolution of the theoretical "1965" curriculum will not only affect those graduates of 1965 but will have great meaning to those of us who have continually fumbled for higher education and have groped for night classes, seminars and special studies to better understand our treatment media and the interpersonal relationships between our profession and our individual communities.

How can we gain in professional growth and status and find confidence in our treatment techniques, when our professional literature does not even include an intelligible definition of the skills and knowledge we try so hard to attain? Are our own goals typed deeply in our working philosophy, so that our practice as an asset to the medical team, is characterized by an effective application of fundamental knowledge, flexibility and a basic understanding of people?

It has certainly been necessary for us to gain ideas from each other and thus the importance of continued articles on adaptive equipment and other treatment media that have composed the major portions of our past literary works. But what a pleasure to get down to the "meat" of basic philosophy and read the valuable thoughts of those experienced in our educational studies and administrative problems.

Let us continue such a gratifying quest to improve our professional competence and look for continued concern and growth, not only in our educational spheres, but in the content of our "mouthpiece," AJOT, too.

Sincerely,
Susan C. Kerseg, O.T.R.
Evaluator
United Cerebral Palsy
Work Evaluation Project
Portland, Oregon.

To the Editor:

The day our AJOT's arrived, we read Carlotta Welles' "DaVinci Is Dead," attracted by the intriguing title. The opening paragraph was wonderful, and the article throughout prompts us to write a note to you.

It is gratifying to have a well-known occupational therapy leader come out in print with the thorough realization that OT's like all other people, are not able to do everything, and should not hesitate to baldly state that they are not qualified to so do. With the growth in scope and complexity of all medical fields, it seems reasonable to expect the OT neophyte to aim at expertness in part of the area, rather than to be confused by his lack of ability to adequately absorb and practice all of it.

Since we are "on the phone," let us add that the article by Eleanor Metheny, Ph.D., "Effects and Consequences," is one of the most succinctly stated and beautifully worded ones we have ever read. Other staff members in our facility have had parts of it copied for use in various teaching and speaking situations.

Thanks very much for these and the many other excellent articles in this and other issues. These two hit on our needs so strongly that we wanted to let you know.

Grace Johnson, O.T.R.
Supervisor, Occupational Therapy
Fairmont Hospital,
San Leandro, California.

To the Editor:

Congratulations to Miss Cromwell for her excellent article, "A Procedure for Pre-Vocational Evaluation," in the February issue. It contains clear, concise guideposts for therapists who are developing procedures for comprehensive rehabilitation programs. Miss Cromwell shows wisdom in suggesting the assistance of experts in psychology or industry, who are trained in the experimental procedures, in setting up test batteries and developing reliable and valid procedures.

Miss Cromwell's suggestion for the ADL scoring is interesting, as she states that this inclusion may have some significance in screening the general patient group for placement. However we must be very cautious in accepting these cumulative figures as the final authority, as the layman is apt to misinterpret the total in making his judgments about the patient. The tasks on the ADL rating sheets contribute to the total picture, but abilities and limitations in the specific areas will determine the success or failure of a patient's performance on any given job. It would be interesting to see the exact methods of rating used at UCPA-LAC.

Importance of verbal and written communication of our findings cannot be stressed too heavily. The use of standardized procedures enables the occupational therapist to present data to other disciplines in a less ambiguous manner. The clear report becomes meaningful to those who are planning with the patient in the prevocational area.

One problem is suggested by the article: Should the therapist who does not have specific experience with psychological testing or who does not have opportunity for close collaboration with an expert attempt such an extensive program of testing manual skills and attitudes? Could great disservice be done to the patients by judgments made from inappropriate procedures in a testing area that is unsuitable by a therapist pressed for time? The therapist who does not have time to develop the sound kind of program which Miss Cromwell suggests can still make valuable observations based on an awareness of the vocational implications in her everyday activities. In her progress notes she can give factual incidents demonstrating hand skills, work attitudes and physical capacities that would be of great value to the counselor who is planning with the patient. Many times true abilities and attitudes are more readily seen in natural working periods. These attitudes may be hidden or disguised in formal testing procedures. Therefore it would seem that a total evaluation of the patient might well include both testing and non-testing observations.

The important conclusion from this article is that Miss Cromwell's steps are a sound framework upon which we can develop our prevocational programs in the future.

Further study of the procedures available and the development of new methods are now needed. This is the challenge to therapists interested in the prevocational area.

Dorothy E. Whitford, O.T.R.
Columbus, Ohio.

To the Editor:

The February article "A Procedure for Pre-Vocational Evaluation" by Florence Cromwell may inspire a follow-up article on the expanding role of the occupational therapist in pre-vocational evaluation. We know that the therapist can offer more than just a comprehensive report. Much can be done to encourage good work habits and skills, to help clients think realistically about job goals, and to present a job orientation program including such areas as why people work, what people do for a living, what jobs are available and the demands of working.

The importance of developing and using a battery of pre-vocational tests can not be over-stressed. To the vocational counselor who often has a big job of placement in the community, a comprehensive report can be his most useful tool. The report, impressive with scientifically computed scores, can be meaningless if the report can not be translated to a prospective employer in terms which will strongly imply that the client is not going to cost him money but will help him make it.

The barriers to placement, even with adequate diagnostic testing, are poor academic background, inadequate social economic influences, insignificant work history, limited intelligence, behavioral quirks, drinking, age and race in addition to the initial disability and employer resistance to certain disabilities such as epilepsy, his fear of industrial accidents or aggravation to old ones.

In any case placement of a client in a job suited to his abilities is not easy. A good pre-vocational evaluation report is a start, making fewer barriers to hurdle.

John Caprio, O.T.R.
Director, Work Evaluation and Training, Goodwill Industries,
Columbus, Ohio.

To the Editor:

AJOT, November, 1958! What an invitation to thinking: professional thinking—and even perhaps to professional day-dreaming.

Like a view from the stratosphere our contributors have enabled us to see in aerial perspective the contours of our past and present accomplishments as a profession. It is an exciting view and this reviewer is tempted to take off after each article with tag-playing comments.

For practical purposes, however, these spontaneous and perhaps largely irrelevant comments will be constrained to those articles dealing with the expressed need for specialization, curricular revision and the difficulty of formulating a philosophy or philosophies of occupational therapy.

Comment is compelled as the following areas come into focus serially:

Welles vividly concretizes the need for horizontal and vertical divisions of occupational therapy for the purpose of clarifying areas of specialization. This seems to be a need that has been long felt if not widely discussed.

West sketches in over the existing canvas of graduate study the ideal potential, present in some and inherent in many of our schools, for "creative activity, productive and critical inquiry."

Reilly's discussion leading to the projections of a future curriculum seems particularly provocative. Her leads in regard to "statistics for orientation toward quantitative thinking" and her reference to semantics (general?) for qualitative thinking seem cogent and comprehensive.

Jantzen has done some much-needed spade work in presenting so well the case for graduate recognition of the post-degree certificate.

Thompson's quotable quote in regard to subject matter or teaching: "Does this extend the freedom to learn and the ability to participate *and* does this square with our constellation of democratic values?" This firm but flexible directive should serve in spirit as a rudder for taking off into the uncharted on a landmark-plotting skirmish for a philosophy applicable to occupational therapy.

Reilly's remark about philosophy which "determines the direction which the curriculum takes" and her comment, "Unfortunately our philosophy in occupational therapy has not been formulated to any great extent," provide the stimulus for the following response.

Is the occupational therapist imbued consciously or unconsciously by some fortuitous philosophy? Or do circumstances (including professional training) and the activities he is able to provide hold the answer to his ability to serve a therapeutic purpose?

—Dorothy Knight, O.T.R.

Calendar of Events

April 3-5, 1959
Midyear Meeting of the
Board of Management
American Occupational Therapy Association
Sheraton Lincoln Hotel
Indianapolis, Indiana

April 28-May 1, 1959
American Hospital—AOTA Institute
Hotel Roosevelt
Waco, Texas

June 21-26, 1959
Annual Conference of the
American Physical Therapy Association
Hotel Leamington
Minneapolis, Minnesota

August 20-September 5, 1959
Annual Meeting of the
World Federation for Mental Health
Barcelona, Spain

October 16-23, 1959
Annual Conference of the
American Occupational Therapy Association
Hotel Morrison
Chicago, Illinois

DELEGATES DIVISION

DISTRICT OF COLUMBIA

Delegate-Reporter, Arvilla D. Merrill, O.T.R.

Going Ahead to Getting 'em Back

Back to Where?

Home — School — Work

This was the institute on Activities of Daily Living sponsored by the District of Columbia Occupational Therapy Associations education and special studies committee. At the first meeting on March 18, 1958, Miss Irene Hollis, O.T.R., our field consultant in rehabilitation, spoke on "Meeting Our Function in Rehabilitation." At this meeting a panel of occupational therapists and one physical therapist presented "Exploration of Techniques of Evaluation, Testing, and Instruction in Activities of Daily Living in the fields of Pediatrics, Psychiatry and Physical Disabilities."

At the second institute meeting, held early in April, staff members from Walter Reed Army Hospital demonstrated activities of daily living with several upper extremity amputees and showed a film: "Upper Extremity Prosthetic Principles."

The Tri-State luncheon meeting at De Witt Army Hospital, Fort Belvoir, Virginia, with Maryland, Virginia and the District of Columbia Occupational Therapy Associations members participating, proved to be a stimulating day and became a third part of our institute program. Muriel Zimmerman, O.T.R., from the New York University—Bellevue Medical Center Institute of Physical Medicine and Rehabilitation chose as her subject, "Splinting, Bracing and Self Help Devices." Following luncheon, the afternoon session was devoted to demonstrations and experimentation in small groups showing other methods available to therapists.

The institutes fourth meeting, borrowing from our national association conference, presented a techniques fair with demonstrations of activities of daily living, adapted equipment, and instruction techniques in pediatrics, psychiatry and physical disabilities. A final summary, discussion and feed back session, in small groups, was held in May to complete this ambitious educational program.

At the regular monthly meetings the program included an idea exchange, the film "The Long Cane," the District of Columbia Tuberculosis Association program, annual meeting, installation of officers and constitution revisions with two dinner meetings during the year.

The public information and recruitment committee has been very active and several members have spoken at career day programs in schools, to other lay groups, and have appeared on television. The first edition of the District of Columbia Occupational Therapy Newsletter has come off the presses recently, a really ambitious undertaking.

OFFICERS

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Vice-president ..... Captain Winifred Watson, O.T.R.
Secretary ..... Peggy Evans, O.T.R.
Treasurer ..... Marjorie Conway, O.T.R.
Delegate ..... Arvilla D. Merrill, O.T.R.
Alternate delegate ..... B. Jean Bellman, O.T.R.

NORTH AND SOUTH DAKOTA

Delegate-Reporter, William French, O.T.R.

The Dakota Occupational Therapy Association continues to grow, much to our satisfaction. Several projects have been completed and several more are in the making.

The Dakota Occupational Therapy Association constitution was revised to meet national office recommendations and has been accepted as satisfactory by the American Occupational Therapy Association.

Three Newsletters were published during the year.

Miss Janet Hoskins, recruitment delegate from the Dakota Occupational Therapy Association, attended the regional recruitment meeting in Minneapolis. Because of our large geographical area, one recruitment chairman was appointed for each state. Much effort was made in the area of recruitment and publicity, a great deal of the work being done by the Sioux Falls, South Dakota, group and the OT department at the University of North Dakota.

New clinical training facilities have been established at the South Dakota State Tuberculosis Hospital, Sanator, and at the University of North Dakota Medical Center Rehabilitation Unit. One more is being planned at the North Dakota State Psychiatric Hospital in Jamestown.

The Occupational Therapy School at the University of North Dakota has grown to a total enrollment of thirty students. Students are now being graduated and it is hoped that some of these new occupational therapists will fill vacancies in the Dakotas.

Business acted upon by the Dakota Occupational Therapy Association has been in keeping with the requests of the American Occupational Association. Projects being formulated are: (1) A scholarship fund for use at the University of North Dakota. (2) A folder of literature for hospitals contemplating new occupational therapy clinics. (3) A survey of the membership and potential membership. (4) A special effort to fill vacancies throughout the two states. (5) A medical advisory board for Dakota Occupational Therapy Association.

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Vice-president ..... Sue Gentry, O.T.R.
Treasurer ..... Jean Kraft, O.T.R.
Secretary ..... Amy Lind, O.T.R.
Delegate ..... William French, O.T.R.

OHIO

Delegate-Reporter, Margaret K. Mathiott, O.T.R.

The Ohio Occupational Therapy Association is proud to have given birth to its fifth district, the Akron area. The four siblings contributed to the new treasury to welcome and identify it as now being a real part of the family.

We are growing in accepting responsibility for individual and group work on a number one problem of our profession, recruitment and public information. Our state chairman has sparked interest for more activity since attending the regional workshop in Minneapolis. She is serving as a liaison person with the AOTA office, the national committee and district committees.

Through a poll of the membership, "Research Methodology" was a majority request for the study topic at our annual spring meeting. In addition to this mailing, we routinely send newsletters and delegate letters to members, as well as communications with district chairmen, to help tie the work of all in the state.

We received a 65 per cent return to the questionnaire survey on lowered dues for nonpracticing O.T.R.'s. As a result of this, we have available a listing of occupational therapists in Ohio and West Virginia.

Other activities and/or happenings include: a donation of money for the 1962 Congress of the World Federation in Philadelphia; the loss of our president to the AOTA education office; the addition of our new president to the Board of Management; and, for the first time, an approved budget to print a state wide membership roster. We have experimented several years with this idea and found such a roster valuable enough to give it full support. The task is the responsibility of our membership chairman and committee (district membership chairmen).

The districts continue with the plan of sending money to the state treasury for the scholarship fund. Thus far the amount sent is dependent on ability and interest.

The active role of our alternate delegate in the last two years has been helpful within our state and in cooperation with the national association.

OFFICERS

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Secretary ..... Margaret S. Nelson, O.T.R.
Treasurer ..... Charlotte Burpee, O.T.R.
Delegate ..... Margaret K. Mathiott, O.T.R.
Alternate Delegate ..... Wilma K. Morrow, O.T.R.

DISTRICT CHAIRMEN

Akron ..... Margaret Dieringer, O.T.R.
Cincinnati ..... Catherine Peffer, O.T.R.
Cleveland ..... Karl Ireland, O.T.R.
Columbus ..... Joanne C. Smith, O.T.R
Dayton ..... Shirley Sinder, O.T.R.

TEXAS

Delegate-Reporter, Irene Greer Robertson, O.T.R.

A meeting of Mrs. Rena Worthington, director of the School of Occupational Therapy at Texas Woman's University, with representatives of several organizations such as the Texas Tuberculosis Association, Texas Society Crippled Children and Adults, Texas Heart Association, Texas Mental Health Association, etc., resulted in activities that are most encouraging. These groups, who come to us wanting therapists, are now joining us in recruitment efforts to help supply the need. The Texas Tuberculosis Association has, with the cooperation of local therapists and Texas Woman's University faculty, conducted one and two day orientation programs in Houston and in Dallas. Other organizations have published series of articles in their magazines on occupational therapy and the need for additional therapists. They have outlined the responsibility of their local groups to aid in recruitment and these groups have been supplied with a list of therapists in their area on whom they may call for materials and speakers.

Through the efforts of a member of our professional advisory board versed in public relations activities, appropriate spot announcements have been distributed to every radio station in the state. In November the AOTA conducted its regional recruitment workshop in Dallas. With the impetus from these events added to the continuous individual efforts of the therapists in their own communities we hope to reap a large and promising group of potential therapists.

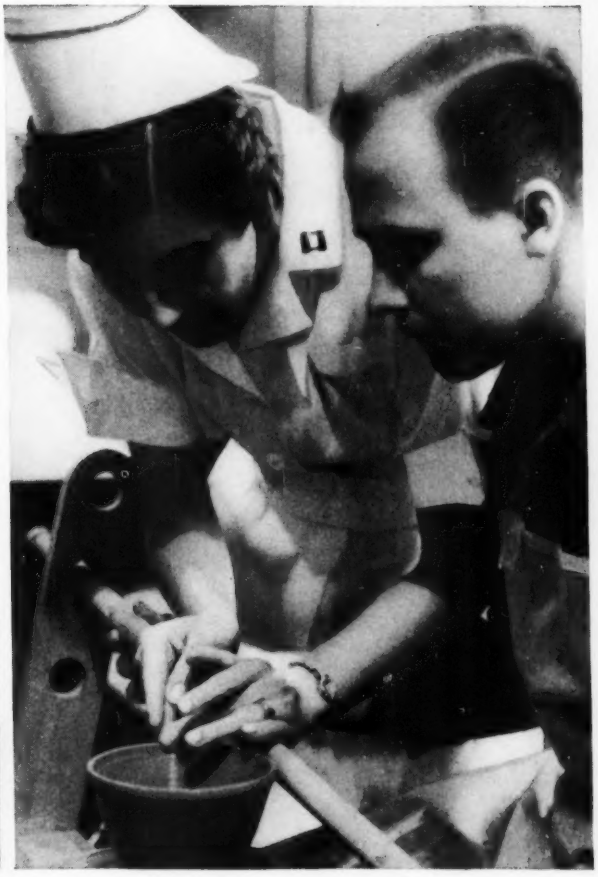
The near depletion of our scholarship funds in giving assistance to students in need has led to a redoubling of fund raising efforts. The most successful of recent projects has been the note paper with the beautiful fingerpaint design by Mrs. Lucile Lacy which is being considered for perpetuation as a continuing project by one of our districts.

No report would be complete without mention of our one full meeting of the association. We were particularly pleased with the program plan for the 1958 meeting in Dallas. It was held the week-end preceding the regional Office of Vocational Rehabilitation meeting and it dealt with the therapist and prevocational exploration. Florence Stattel, qualified in both OT and rehabilitation counseling, effectively bridged the gap and charted the course. The participation of rehabilitation counselors in all discussion groups added greatly to the meaningfulness of our meeting.

The organization of additional districts and the more effective functioning of districts in this area of wide open spaces has been most gratifying this past year.

OFFICERS

President ..... Mary Alice Coombs, O.T.R.
Vice-president ..... Rose Elliott, O.T.R.
Secretary ..... Alice Amison Curd, O.T.R.
Treasurer ..... Ruth Whipple, O.T.R.
Delegate ..... Irene Greer Robertson, O.T.R.
Alternate delegate ..... Hope Keeney, O.T.R.



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Modern Prosthetics. Report on the First International Prosthetics Course, Copenhagen, August, 1957; 97 pages, $1.00.

Planning for Victory Over Disablement. Proceedings of the Seventh World Congress on Rehabilitation, ISWC, London, 1957; 525 pages, $3.00.

Changing Attitudes Toward the Disabled. Proceedings of the Sixth World Congress on Rehabilitation, ISWC, The Hague, 1954; 287 pages, $3.00.

Selective Placement of the Handicapped. Papers presented at a seminar held in Stockholm, 1955; 113 pages, $1.00.

Welfare Work for the Physically Handicapped in Japan. The present situation of the physically handicapped in Japan and the work carried on among them, 1958; 98 pages, $1.00.

Study of the Adaptability of Disabled Workers. Human Resources Study, No. 3, Human Resources Corp., New York, 1958; 26 pages, $1.00.

Prostheses, Braces and Technical Aids Journal. Published tri-annually by the ISWC Committee on Prostheses, Braces and Technical Aids, Copenhagen; annual subscription, $3.00.

Technical Adequacy and Practical Application of the Heidelberg Pneumantic Prosthesis. By E. Marquardt and O. Haefner, Heidelberg, 1957; from the German; 38 pages, $1.00.

Compendium on the Activities of World Organizations Interested in the Handicapped. Description of 27 Non-Governmental Organizations, New York, 1958; 88 pages, $2.00.

Never Say Die. A story about one person's return to everyday living after being partly paralyzed. Anthony Richardson, London, 1959; 110 pages, $2.25.

Conquering Physical Handicaps. Available soon. Report of the Pan Pacific Conference on Rehabilitation, Sydney, 1958; $1.50.

Besides the above named books, the International Society also has available thirty-five titles in French and Spanish all dealing with some phase of physical rehabilitation. *Members of the United States Committee for the I.S.W.C. are allowed a 10% discount on all purchases. Professional membership for individuals is $10.00 per year; for organizations, $25.00 per year. In addition to this discount, members receive the Society's quarterly BULLETIN and will, upon request, receive without additional cost the *Journal on Prostheses, Braces and Technical Aids.* The services of the International Rehabilitation Film Library are also available to members without additional charge.

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OFFICIAL PUBLICATION OF THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Vol. XIII, No. 2, Part II | 1959 | March-April

Buyer's Guide Part II

TABLE *of* CONTENTS

ARTICLES

DIVISIONS

BUYER'S GUIDE

This is Part II of a two-part issue.

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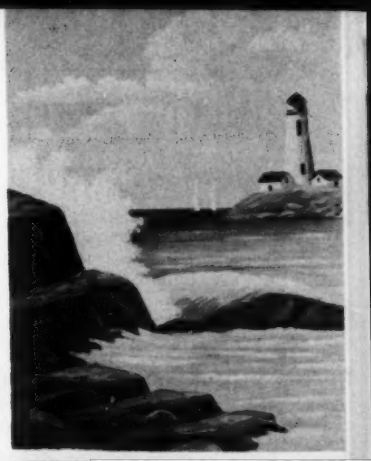

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THE AMERICAN JOURNAL

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Official Publication of the American Occupational Therapy Association

Buyer's Guide

March-April 1959 Vol. XIII, No. 2, Part II

AN INVESTIGATION OF ABSTRACT BEHAVIOR IN PATIENTS WITH CEREBRAL VASCULAR ACCIDENTS*

HARRIET RUTH HAGUE, M.A., O.T.R.†

THE PROBLEM

Advances in modern medicine are now lengthening the life expectancy of the American population. The adult patient surviving a cerebral vascular accident is comprising an increased proportion of the population in general hospitals and rehabilitation centers. Extension of new knowledge is necessary as a basis for more adequate rehabilitation which will enable these patients to live useful lives.

Purpose of the study. The purpose of this study was to ascertain the probability of an existing disturbance in the abstract behavior in a group of patients with a cerebral vascular accident of the non-dominant hemisphere resulting in hemiplegia.

Importance of the study. Occupational therapy implies performance by a patient. This performance is dependent upon some combination of auditory, visual or tactile stimulation which affects the patient, and which he integrates to result in motor behavior. The integration process may be a relatively simple or complex procedure depending on the motor behavior necessary to meet the stimulus demand. The writer has observed that the patient with a cerebral vascular accident of the non-dominant hemisphere often shows motor performance at a lower level than might be expected in relation to his physical condition.

An impairment of behavior relevant to the abstract attitude implies an impairment in the capacity level of the total personality. Therefore, if the probability of a disturbance in abstract behavior exists in this population, it may account for the low motor performance level. Knowledge of the extent and level of disturbance could suggest methods of approach for treatment.

INTERPRETATION OF THE LITERATURE

The literature in recent years indicates an increasing interest in the lateralization of function in the human brain. A few studies have recognized that lateralization may have some differential effect in the hemiplegic patient depending on the side of the unilateral lesion.

No specific characteristics seem definitely to have been associated with injury in the minor hemisphere of the human brain. Many authorities suggest that an organizational type of visual-motor performance may be impaired with a minor hemisphere lesion.[1,2,3,4,5,6]

Visual-spatial perception may be disturbed by parieto-occipital damage in either hemisphere.[5] Right or left cerebral vascular accident patients could have a disturbance in perception, particularly when there is damage to the middle cerebral artery. Wood's study substantiates an equal impairment of perception in right and left cerebral palsied spastic hemiplegic cases.[7]

In the absence of specific visual perception difficulty, patients with parieto-occipital lesions of the minor hemisphere may still demonstrate difficulty in visual-motor performance. This defect is most apparent when the motor performance demands spatial analysis and abstract reasoning.[3,4,5]

Frontal lobe lesions in the minor hemisphere do not indicate any clearly defined symptoms. There is a suggestion of a qualitative difference of approach.[3,8]

*An abstract of a thesis presented to the faculty of the graduate school of the University of Southern California in partial fulfillment of the requirements for the degree of Master of Arts (Occupational Therapy).

†Fellow of the National Foundation, 1957-58.

The neurological findings suggest that psychological intelligence tests involving visual-motor performance or spatial relationships may indicate differential effects depending upon the lesion laterality. Heilbrun demonstrated that both right and left hemisphere brain-damaged patients were inferior to the control group on the spatial battery.[11] Several authorities indicate that minor hemisphere involvement is reflected in lowered performance scores; while major hemisphere involvement is reflected in lower verbal scores.[2,6,8]

The patient with a vascular lesion of the minor hemisphere might be impaired in organizational visual-motor performance although his dominant extremity is physically unimpaired. Bauer and Becka indicate an intellectual loss particularly on non-language tasks in the non-dominant hemiplegic patient.[8] Carroll's study also shows judgment difficulty particularly in visual, spatial, or temporal concepts in the non-dominant hemiplegic.[9] Her observation of performance in relation to the left side of space is suggestive of the Patterson and Zangwill syndrome.[9]

METHOD OF PROCEDURE

Fifteen patients from the following institutions were obtained for testing: California Rehabilitation Center, Los Angeles County Harbor General Hospital, John Wesley County Hospital of Los Angeles, and the Community Rehabilitation Industries of Long Beach, California.

The criterion for selection was a cerebral vascular accident, with a minimum of one month past onset, manifesting physical involvement of the non-writing hand. The age limits were twenty-one through sixty-five years. Uncontrolled variables were sex, duration of disability and treatment factors. No patients with other additional diagnosed brain disease were included. All patients who met the criterion and were available during the period of the collection of the data were tested.

Of the fifteen patients who participated nine were male and six were female. The age range was twenty-seven to sixty-two. The mean age was 51.4 years. The length of disability range was one month to one hundred months. The length of disability mean was 32.53 months.

The patients were all right-handed left hemiplegics. The diagnoses as ascertained from the medical records were: right middle cerebral artery thrombosis, four cases; right common carotid cerebral aneurysm, one case; ruptured longitudinal cerebral aneurysm, one case; right hemangioma, one case; cerebral thrombosis, two cases. Six patients had non-differential diagnoses of left hemiplegia resulting from a cerebral vascular accident.

Secondary diagnoses represented in the population were: hypertensive heart disease, one; acute myocardial infarctions, one; angina pectoris, one; diabetes mellitus, two; tic douloureux with surgical intervention, one; slight deafness, two; peptic ulcers, one; allergic bronchial asthma, one; chronic drinking, two; generalized atherosclerosis, one; known history of hypertension, four. One patient had symptoms of vertigo nystagmus and hemaniopsia with gross normal vision.

No intelligence quotients were obtained for this population. The subjects were considered to be within normal intelligence range on the basis of employment previous to hospitalization.

TEST APPARATUS

The Grassi Block Substitution Test for Measuring Organic Brain Pathology[10] was used. This is a standardized psychological test which was devised to demonstrate impairment in concrete and abstract behavior. Two levels, simple and complex, of both concrete and abstract performance have been established. In addition, the test demonstrates the ability to shift from a concrete to an abstract approach. It is particularly sensitive to minimal organic changes.

The subject is asked to construct designs with colored cubes (Kohs) from actual block models placed before him. At the simple levels he reproduces the top of the block model; at the complex levels he reproduces the top, bottom and sides of the model. There are five different designs from which the patient must construct twenty patterns representing the four levels of each design.

At the concrete level mere copying is sufficient for success. The abstract levels require that the color scheme of all designs be altered. Imitation is not sufficient at the abstract level since several variables must be co-ordinated in order to successfully complete the designs.[10]

The test is scored on accuracy of response, and speed of shifting from one level to another. The patient receives a score of one for each correct response. He is penalized one-half point if the correct response requires more than 120 seconds. He receives additional one-half points for shifting in ten seconds or less. The total possible score is thirty points. Twenty points or more indicates no evidence of intellectual impairment. Sixteen to twenty points indicates moderate intellectual impairment. Zero to sixteen points indicates severe intellectual impairment.

The test includes a list of behavioral signs. The examiner can comment on the subject's behavior regarding time, directions, reassurance, perseveration, recognition, trial and error, corrections, spatial disorientation, diagonal relationships or other significant behavior. The behavior observed should

GRASSI BLOCK SUBSTITUTION TEST SCORES OF NON-DOMINANT HEMIPLEGIC PATIENTS WITH CEREBRAL VASCULAR ACCIDENTS

20-30 No Evidence of Intellectual Impairment	16-19 Moderate Intellectual Impairment	0-15 Severe Intellectual Impairment
22½	18½	15½
20	18½	14½
20	17	14
	16	13½
		12½
		12½
		10½
		6½

Table I

be consistent with the numerical score if a valid performance has been obtained.[10]

Testing Procedure

Each patient was tested once by the examiner. The test was given individually in an isolated quiet area with the patient seated at a table. All subjects used the non-involved right hand.

The patient was given four four-by-six-inch pieces of colored paper corresponding to the colors on the cubes. He was asked to identify the four colors. No patient was unable to identify the colors.

The test was administered according to the directions in the manual.[10] When the demonstration block was presented, the patient was requested to indicate the area on the table most advantageous to his vision. Two changes were made in the directions. The word *design* was changed to *pattern* because in trial testing it gave indications of contributing to better understanding of the directions. The words "when you think that it is right" were inserted before the final words, "let me know that you have finished." Trial testing indicated that the hypertensive tendencies of this population may have contributed to carelessness when attempting speed. The patients were correcting errors after stating that they were finished. The patients were given five minutes rest between Design III and IV to counteract signs of physical fatigue which might have contributed to carelessness or insufficient attention.

Analysis and Interpretation of the Test Results

The analysis of the test results indicates that an existing disturbance in abstract behavior was found in the majority of a group of patients with a cerebral vascular accident of the non-dominant hemisphere resulting in hemiplegia. The scores obtained by the subjects are presented in Table I.

Table I shows that three subjects obtained scores indicating no evidence of intellectual impairment, four subjects obtained scores indicating moderate intellectual impairment, and eight subjects obtained scores indicating severe intellectual impairment.

A comparison of Tables II and III indicates that the normal subjects did not fail on the first three steps, while the hemiplegic subjects showed five failures on Step 1, twenty-one failures on Step 2, and eight failures on Step 3. The normal subjects failed forty times in 430 attempts on Step 4, or nine percent of the attempts. The hemiplegic patients failed fifty-one times in seventy-five attempts on Step 4, or 68 per cent of the attempts.

Further analysis of the hemiplegic population indicates that four subjects accounted for the five failures in simple concrete behavior on Step 1.

ITEM ANALYSIS OF THE FAILURES OF 86 NORMAL SUBJECTS IN THE GRASSI STUDY

Normals	Design I	Design II	Design III	Design IV	Design V	Total Errors
Step 1	0	0	0	0	0	0
Step 2	0	0	0	0	0	0
Step 3	0	0	0	0	0	0
Step 4	4	6	8	12	10	40

Table II

It appears that simple concrete behavior was not particularly disturbed in this population. Five hemiplegic subjects accounted for the eight errors in complex concrete behavior on Step 3. It appears that complex concrete behavior possibly was occasionally disturbed in this population. Both types of concrete behavior were impaired relative to the normal behavior where no failures occurred on Steps 1 and 3.

ITEM ANALYSIS OF THE FAILURES OF 15 NON-DOMINANT HEMIPLEGIC PATIENTS WITH CEREBRAL VASCULAR ACCIDENTS

Hemiplegics	Design I	Design II	Design III	Design IV	Design V	Total Errors
Step 1	0	1	1	2	1	5
Step 2	3	3	2	8	5	21
Step 3	3	3	1	0	1	8
Step 4	9	11	9	10	12	51

Table III

Simple abstract behavior, Step 2, was failed twenty-one times. Ten hemiplegic patients accounted for the twenty-one failures in simple abstraction. The number of patients failing in relation to the number of failures indicates a trend toward difficulty with simple abstraction in the whole hemiplegic population. Simple abstract behavior seems to be more impaired than either type of concrete behavior. In relation to the normal population where no failures occurred on Step 2, the group of hemiplegic patients tested showed definite impairment.

Complex abstract behavior shows definite impairment in the hemiplegic population. Fourteen of the fifteen subjects failed one or more times on Step 4. Five of the fifteen subjects failed all five patterns on Step 4. In relation to forty failures by eighty-six normals, fifty-one failures by

fifteen hemiplegics indicates definite severe impairment in complex abstract behavior. Four patients failed only in abstraction processes with failures in both Steps 2 and 4. Two patients failed only in complex abstraction, Step 4. Only one patient did not show any failures.

The comparison of the test results from the normal and the non-dominant hemiplegic population seems to indicate that the non-dominant hemiplegic patients may be expected to indicate some difficulty with visual-motor tasks involving simple abstract reasoning; and definite or complete failure on visual-motor tasks involving complex abstract reasoning. The difficulty in visual-motor performance may appear regardless of whether the task is performed with the involved or non-involved extremity.

In view of these results, it seems that when the sensory and motor involvement of the left hemiplegic patient is being evaluated for treatment, it might be in order to also evaluate his abstract behavior. If the left hemiplegic patient has difficulty with abstraction, it may affect his performance level on visual-motor tasks. The visual-motor tasks may have to be planned so the patient can function on a concrete basis.

The ten signs of typical organic performance listed on the test were recorded for behavior analysis. These behavioral signs are excessive time, inability to remember directions, need for reassurance, marked perseveration, inability to recognize correct or incorrect solutions, trial and error performance, inability to make corrections, spatial disorientation, inability to reproduce diagonal lines and relationships, and disturbed shifting from one type of performance to another. All the signs were observed during the testing of the hemiplegic population. Every patient demonstrated one or more of the behavioral signs. The behavior observed was consistent with the test scores, enhancing the validity of the numerical scores.

The behavioral signs most frequently observed were in the areas of time, recognition and correction, and diagonal relationships. The patients had two apparent difficulties with time. Initially they worked too rapidly, exhibiting their hypertensive tendencies. On Step 4, complex abstraction, they accepted an incorrect solution rapidly, probably to avoid the problem. This became particularly noticeable if the first two designs in Step 4 ended in failure. The other time factor was a very slow performance time typical of a brain-damaged population.

Most of the patients could recognize and correct some of the errors they made in constructing the designs. Some of them changed their correct solutions before deciding they had reached the correct conclusion. The problem of correction became most apparent in complex abstraction where fourteen patients had difficulty. They recognized their solution as incorrect, but with the number of variables involved they could not correct it. Frustration behavior was observed when the patients could not cope with the quantity of factors. The more severely impaired had no comprehension of complex abstraction and could not recognize the correct solution when it was presented to them.

Twelve patients exhibited difficulty in reproducing diagonal lines, and correct relationship between diagonal lines and solid colors. Some of the patients became so involved in attempting to reproduce the diagonal lines that they were unable to consider constructing the pattern as a whole.

The hemiplegic patients seemed to understand the test directions and did not ask to have them repeated frequently. The questions concerning directions suggested that the patients could not perform well abstractly and desired concrete directions for performance on the abstract steps. The subjects did not frequently ask for reassurance. They seemed to rationalize concerning their performance by commenting on one or more of their physical disabilities. The performance indicated that on the first three steps of the designs many of the patients were actively planning a method of procedure. On Step 4, complex abstraction, most of the patients regressed to a trial and error performance without evidence of planning. Some of the patients said they could not plan with the number of variables involved in Step 4. Spatial disorientation was apparent only in the lowest scores. These patients, unable to see the design as a whole, reconstructed it by attaching each individual block to the corresponding block in the model.

Additional observed behavior yielded some information that may be a useful guide in evaluating whether the non-dominant hemiplegic patient is being asked to perform beyond his capacity. Several patients expressed a time sense difficulty. They could tell time, but were insecure with an irregularity in their schedule. They needed frequent reassurance that someone would manage the changed time schedule. The hemiplegic subjects could verbalize about directions, but the performance indicated that this expressed understanding of concepts should not be accepted unless substantiated by performance.

Many patients asked to perform beyond their ability sought to escape. Typical behavior was one of several methods. The patient would resort to a discussion of his physical symptoms and rely on them to account for his poor performance. Another method was to become conversationally

adept and to talk continually about any subject in order to delay performing. Frequently a patient would joke, laugh or indicate that the task performance requested was ridiculous and therefore avoid becoming personally involved. Some patients would accept a poor standard of performance for themselves in order to be finished. If a patient could not visualize parts in relation to a whole problem, he might exhibit distractibility or lack of attention. These results suggest that the hemiplegic patient may become rigidly attached to a routine in which he feels secure. If he cannot escape by any acceptable method, he may quit completely and refuse any further contact with the problem situation. It seems important to realize that these instances of non-cooperative behavior may be observed as difficulties in visual-motor performance due to abstraction impairment.

It has been suggested that the non-dominant hemiplegic patient with an impairment of visual, spatial, or temporal concepts appears unable to generalize in relearning.[9] Therefore, this may be an area of difficulty which will need careful regulation and consideration in treatment.

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This section of the March-April issue contains a directory of companies selling occupational therapy equipment and media supplies. These companies are listed in alphabetical order and by classification. Use this directory for ready reference when ordering supplies, as Journal advertisers are listed in bold face type. These are the suppliers ready and willing to serve you and your department.

THE INITIAL INTERVIEW AS A TREATMENT PROCEDURE IN OCCUPATIONAL THERAPY*

BERNADINE G. CHOREN, M.A., O.T.R.

THE PROBLEM

An area of interest repeatedly explored in meetings, institutes and conferences of occupational therapists is that of communications. Interest has been stimulated in investigations of communication between therapist and physician, therapist and supervisor, and among department members. It appears to this investigator that a core area of communication in occupational therapy has been overlooked, and it is that between the therapist and the patient. The patient is the central figure in the practice of occupational therapy, and sound principles of treatment many times begin with the verbal interactions that occur between the patient and the therapist. Professions such as medicine and other paramedical groups have certain well-developed techniques to guide their verbal communications with patients. This guidance technique, as it is used in treatment situations, is known as the interview. It was the purpose of this study to explore the role of the interview in occupational therapy and to establish criteria for the initial interview that would contribute to treatment planning.

REVIEW OF LITERATURE

A review of the literature shows the use of the interview technique as a process of communication which ranges on a continuum from its simplest form, as an exchange of information between associates, to its most complex form, that of psychotherapy used as a treatment procedure. It is a tool widely used in the medical profession by doctors, clinical psychologists and social workers, all of whom have made contributions to the development of the initial interview as a diagnostic and treatment measure.

A review of the occupational therapy literature shows that the use of the interview as an initial treatment procedure has been largely overlooked in occupational therapy. It shows agreement that sometime during the initial contact of the patient and occupational therapist, rapport should be established and motivation evaluated. It further shows some awareness of a need for development of a technique that would expedite occupational therapy through the initial patient-therapist contact.

PROCEDURES

The schedule of questions. One of the purposes of this study was to explore the role of the initial interview in occupational therapy by means of a question schedule. In preparing the question schedule the investigator used the vocabulary of occupational therapy. The questions were primarily related to the verbal communication that might occur during the initial patient-therapist contact. They were to serve as a schedule with which to interview occupational therapists who were known to have been involved in a situation where the initial interview might have been used. The purpose was to ascertain whether or not specific interview techniques were followed in occupational therapy clinics and how the therapist approached the patient in his initial contact with him.

Population interviewed. The subjects interviewed were thirty registered occupational therapists who were currently employed in eight hospitals in the Los Angeles area, and five occupational therapy students who had had at least six months of clinical training. The thirty therapists represented sixty per cent of the total number of registered occupational therapists in the Los Angeles area were were working with physically disabled patients over eighteen years of age. They were selected because of their availability. The occupational therapy students interviewed were affiliates at three of the hospitals.

The interview procedure. Interview arrangements were made by the investigator with the occupational therapy department chief of each of eight institutions visited. The chief therapist scheduled individual interviews with the staff members concerned. The interviews were scheduled at the convenience of the participants and were usually conducted in the occupational therapy office. Each interview took approximately one hour. All interviews were held during a six week period.

The interviewees were told that the investigator was interested in their initial patient contact. No mention was made of the word "interview" in relation to the purpose of the study. No identifying data such as names of individuals

*An abstract of a thesis presented to the faculty of the graduate school of the University of Southern California in partial fulfillment of the requirements for the degree of Master of Arts (Occupational Therapy.)

or institutions were sought or recorded. Each cooperating therapist was asked his staff position, his years of experience and the name of the occupational therapy school from which he graduated. These items were not covered by the schedule of questions. Each therapist was instructed to relate his answers to the initial patient contact, and was told that the questions could not be altered or elaborated upon, in order that the procedures remain constant.[1]

FINDINGS

In evaluating the responses to the questions the total responses to each question were tabulated under the heading of that question. Likenesses and differences were categorized as far as possible. Due to the nature of the question schedule, which encouraged free expression, it was difficult to weight responses. The findings, as presented here, are of necessity generalizations of the answers of the population interviewed. The first four questions will not be considered in the findings since they did not have direct bearing on the study. They were used as a device to set the therapist at ease by initially providing him with a few questions of an objective nature. The findings follow.

Question 5. *Assuming ideally that you receive a complete written prescription, would you plan a course of treatment before you see the patient?*

There were two responses of "yes." These therapists said that they felt they had enough experience to interpret a written prescription to plan a course of treatment. Six replied "maybe," and expressed the feeling that they would have a general plan of treatment before seeing the patient.

To this question, twenty-seven answered "no." These responses were emphatic in saying it is not possible to plan a course of treatment before seeing the patient. They said it is necessary to see the patient to determine his needs, interests and capabilities. There was agreement in the "no" group that referrals could not be specific enough to take into account the individuality of the patient.

Question 6. *Do you think you could go ahead and treat the patient on the basis of the prescription without talking to him? Why or why not?*

To this question, four answered "yes." If the referring doctor has explained occupational therapy to the patient, these therapists said they could treat the patient without talking to him first. The feeling was expressed that the patient could be grossly judged, without talking to him. There were nine responses of "maybe." These responses were qualified by such comments as "if the referral is very specific," "if you know how to treat various disabilities you could go ahead," "if the patient did not refuse the activity given him." Twenty-two answered "no." There was a strong emphasis in this "no" group on the necessity for developing a patient-therapist relationship and on treating the person, not the diagnosis. The needs and interests of the patient were presented as being of prime importance.

Question 7. *How do you approach a patient of yours when he comes to occupational therapy the first time?*

Responses to this question were unanimous in agreement that the first thing the therapist does is introduce himself, explain the purpose and value of occupational therapy, and that the treatment has been prescribed by a doctor. There were further qualifications such as "show him around the clinic," and "show him what other patients are doing."

Question 8. *What information do you try to get from the patient when he first comes to occupational therapy?*

The responses to this question were varied, with the majority of the answers ranking in the following order of importance: muscle evaluation, range of motion, activities of daily living, coordination, and patient interests. In these cases an established form of evaluation was usually followed. There were miscellaneous responses, in addition to the above, to include motivation, plans for the future, adjustment to the hospital, and reaction to disability and treatment. Two therapists answered the question by saying they did not try to get any information from the patient the first time they saw him. They responded, "He tells me a lot if I just show that I'll listen" and "I let them do the talking. They will tell me what is most important to them." There were six instances of checking to see if there was some particular activity of daily living that the patient wanted to attain more than any other.

Question 9. *Do you think it is important to get the patient's opinions on his occupational therapy treatment and disability? Why or why not?*

In answer to this question, there was agreement in every instance that it was important to get the patient's opinion on his treatment in that it clarified the role of occupational therapy to the patient and aided the therapist in his approach to the patient. The therapists generally expressed the opinion that it was not important to get the patient's opinions at the first contact.

Question 10. *Could the patient's opinion of his treatment alter your treatment plan in any way?*

There was a "yes" answer in every instance

to this question, which was qualified by adding that the activity or means toward the objective could be altered, but not the objective itself.

Question 11. *How and when do you relate to the patient your place in his treatment program?*

In response to this question, all agreed that the therapist relates his place in the patient's treatment program at the initial contact. It is usually done by explaining the purpose and value of occupational therapy, by telling the patient that he has been referred by the doctor, and by explaining the relationship between occupational therapy and physical therapy.

Question 12. *How do you manage the patient who tells you, the first time he sees you, that occupational therapy is a waste of time as far as he is concerned?*

The answers to this question varied from "explain the benefits of occupational therapy," "tell him the doctor prescribed it as a treatment," to the majority of answers which expressed the opinion that it was the duty of the therapist to find out why the patient thought this way by talking to him about it.

Question 13. *Do you have a special room where you measure and talk to the patient in the initial contact?*

To this question three responded "yes," thirty-two "no." Those who answered "no" said they tried to move to a quiet section of the clinic when measuring or talking to the patient. It was usually done in the midst of other patients who were engaged in activity.

Question 14. *How do you verbally prepare the patient for treatment following your evaluation of his disability?*

All the answers to this question were concerned with explaining the physical evaluation to the patient and correlating the findings with some activity which might be beneficial to the patient. The patient is generally given a choice of activities which will lead to a particular goal that the therapist has formulated, however, two answers indicated the patient participates in the development of goals.

Question 15. *Should the patient have to like occupational therapy for him to benefit from the treatment?*

There were seven responses of "yes" compared with twenty-eight answers of "no" to this question. Those who replied "no" said that the patient could benefit and improve from treatment even if he did not enjoy occupational therapy. All these "no" answers were qualified by adding that it would help if he liked it, but that occupational therapy could be an outlet for any hostility the patient was feeling. Those who answered "yes" said it was a direct reflection on the therapist if the patient did not like occupational therapy, and that he would likely gain no benefit that had a carry-over.

Question 16. *How do you manage the patient who wants to tell you all his troubles the first time he sees you?*

There were thirty responses that indicated that the therapist listens to the patient's problems in the hope that talking will relieve the patient and that listening may be an asset to planning a treatment program. Of these thirty answers, half of the therapists said they would listen for a limited time before either turning the conversation "to a more constructive direction" or excusing themselves on the pretext of being busy. They further indicated that they would refer the patient to the proper hospital service which might help him solve his problems. The majority expressed the opinion that the occupational therapists are in the best position in the hospital to get to know the patient and his problems. Five therapists said it was inappropriate to "use the therapy period for emotional release" or "catharsis."

Question 17. *How do you manage the patient who can't seem to respond to you at all?*

The response to this question, in fifteen instances, was to refer the patient to another therapist. Nine answers suggested that the patient be allowed to respond to the activity rather than to the therapist, seven answered that they would evaluate themselves and try different approaches, four answered that they would attempt to discuss the problem freely with the patient.

Question 18. *In some of the occupational therapy literature of the past few years we have read about the psychotherapeutic role of occupational therapy in the patient-therapist interaction*[2,3,4]. *What does this mean to you, and do you think it applies to physical disabilities?*

In every interview the therapist answered enthusiastically and affirmatively to the latter part of the question. Most respondents had difficulty with the first part of the question. What the psychotherapeutic role of occupational therapy meant to the therapist was an individual and vague matter and proved to be almost impossible to categorize. Only seven of the thirty-five associated it as a part of treatment, while three replied it was outside the realm of occupational therapy as a treatment procedure.

Question 19. *Do you ever consider that you might make the patient uncomfortable, that is, anxious when you talk to him?*

To this question six therapists replied that they were unaware that they might cause the patient to be anxious. The remaining twenty-nine answered they were particularly aware of it in the first contact with the patient. They said that they felt

the anxiety was caused by such factors as aggressiveness on the part of the therapist in beginning treatment and by "bombarding" the patient with questions.

Question 20. *Do you investigate the patient's job skills and experiences and correlate occupational therapy with them?*

There were five responses of "yes." There were twenty-eight responses of "sometimes," which were qualified by saying they referred the patient to the vocational counselor or to a state rehabilitation representative. These answers indicated that past job experiences of the patient were investigated, but were not related to the occupational therapy activity. The remaining two responses were "no."

Question 21. *Do you assume any special attitude when you first see a patient?*

All interviewees responded in some manner —that they were friendly, understanding, objective, and sympathetic when making the first contact with a patient.

Question 22. *Do you respond to the patient on an intellectual level, a feeling level, or both? How do you know?*

The responses to this question were as follows: intellectual level, four; feeling level, three; and both twenty-eight. Those who replied that they responded on the intellectual level expressed the opinion that it was necessary to be detached and that treatment was not as effective if the therapist closely identified with the patient. Generally, the respondents interpreted a response on an intellectual level as related to the patient's educational level, and that they react accordingly. The majority answered that the levels could not really be separated and that it was necessary for the therapist to recognize the feelings behind the patient's verbalizations and actions.

Question 23. *Do you feel when you were a student you were taught ways of initially approaching and interviewing patients? Or did you have to develop your own methods?*

To this question eleven therapists replied they had had lectures on interviewing in the academic situation, but that it was not meaningful at the time, not having seen a patient. Eight said they had learned methods of approaching and interviewing patients during their clinical affiliations, and they learned by observing therapists. Sixteen responded that "experience is the best teacher," and that it is such an individual matter that it cannot be taught.

Question 24. *What do you think is rapport?*

This proved to be such an individual thing that it was impossible to categorize replies although a basic response revolved about the relationship between patient and therapist based on trust and understanding.

General summary of findings. The findings of the question schedule should be interpreted as generalizations that apply to the population which took part in the study. The findings may have been influenced by a lack of question clarity and by interviewer (investigator) error.

The question schedule was based on three factors: the aims of the interview, the process of the interview, and the information that the interview should evoke.

In answering the questions regarding the aims of the interview, the therapists conceded that talking to the patient is of primary importance in the initial patient contact. This was considered important in order to evaluate the patient adequately and to establish a desirable patient-therapist relationship. The interviewees all agreed that proper rapport is essential to maintaining and continuing treatment. In regard to the formulation of treatment goals, the goals that are established are largely those of the therapist, and he uses the means to these goals as motivating factors.

The answers to the questions which referred to the process of the interview indicated that initial meetings with patients are not conducted in an atmosphere of privacy. The therapists said they were interested in helping people, were sympathetic and understanding, and tried to instill confidence in the patient. The therapists recognized that asking questions creates anxiety in the patient, but a question form of evaluation is followed. There was an expressed need to explain to the patient the value and purpose of occupational therapy in terms of a treatment prescribed by a doctor. The general feeling regarding instruction in approaching and interviewing patients is that, although theory can be taught on an academic level, it is a matter of developing individual approaches by observing other therapists or by experience.

Those answers which related to the material that the interview should evoke showed that initial evaluation is seen, in the majority of cases, as a period devoted to taking a physical measurement of the patient's abilities, such as muscle strength and range of motion. During this evaluation an itemized schedule of questions is followed and the therapists do most of the talking by systematized fact-gathering of physical data. The patient's opinions on his treatment and disability are considered important, but in most cases are not evaluated at the first contact with him. If the patient expresses an opinion regarding the occupational therapy activity, the therapist may alter the means to the objective. The

majority of therapists spoke of getting to know the patient better than anyone else in the hospital, yet when the patient talks to the therapist for what appears too long a time, the therapist finds reason to excuse himself. If the patient wants to talk about his problems, the conversation is often turned to a "more constructive direction" or he is referred to another hospital service for help in resolving the problem.

THE RECOMMENDED CRITERIA

The interview findings indicated that some interview techniques used in the paramedical groups are also used in occupational therapy. Their use in occupational therapy, however, is not systematized and is not in keeping with recommended interview procedures. It was indicated that initial contact with the patient is mainly for the purpose of physical evaluation of the patient. Little assessment is made of the patient's mental and emotional resources. It was the opinion of the investigator that the interview, as a tool of evaluation, is not formalized in occupational therapy because of the therapists' lack of background training in its function and lack of understanding of its potential as a positive factor in treatment.

The occupational therapist possesses a readiness for learning interviewing skills. He has, by virtue of his academic background and clinical experience, the basic qualifications of an interviewer. These are an interest in and fundamental understanding of human relationships, background knowledge of psychological development and adjustment of the individual, respect for the individual, and a sincere desire to be helpful.[5,6] The skill in the interview process can be developed through training in interview methods and can be improved through practice.[5]

Establishing rapport. Most authors writing of the interview technique agree that it is essential that rapport be established at the initial contact. Gill stated, "A serious attempt to understand the patient, a warm, human contact, and some mutual appreciation have to be established regardless of who therapist and patient are."[7] It is desirable that the initial interview be conducted in privacy, preferably in a room apart from the occupational therapy clinic. A relationship established between the therapist and the patient when the initial interview is conducted in a crowded, noisy clinic will usually be superficial.

The therapist should introduce himself and arrange for the patient and himself to be comfortably seated. The patient should be given the opportunity to begin the conversation. If he has difficulty in beginning, a general question by the therapist as to why he came to occupational therapy may get him started. If the patient still shows reluctance, the therapist can somewhat structure the situation by explaining his role and suggesting some general possibilities of treatment. But the therapist should remember that he wants to hear how the patient feels about the situation, and he should not overstructure the situation.

Appraisal or psychological evaluation. There will be necessity for some fact-gathering but this should not follow an itemized, predetermined schedule of questioning. It is better that the therapist be alert to all that the patient is saying and then follow his leads. Appraisal should cover the following main areas: the nature of the disorder as the patient sees it, and the motivation for occupational therapy. Skill in getting material in these areas cannot be taught; it can only be developed by conscientious practice.

Reinforcing the patient's motivation. It should be understood by the therapist what the patient expects to derive from treatment. It is erroneous for the therapist to establish goals which the patient may have no desire to attain. Nor should the patient set goals of his own which are unrealistic. The therapist can guide the patient in setting goals, and help him understand the potentials and accept the limitations which are imposed on him by the disability. The patient should see the next step ahead of him as the therapist concludes the interview with recommendations that have been mutually formulated.

The approach utilized by the individual therapist during the initial interview will be determined by his personality structure and by the skill and experience he develops in its use. The initial interview should never in any instance be so highly structured or directive that the therapist loses sight of the patient's view of the situation.

SUMMARY AND RECOMMENDATIONS

It was the purpose of this study to explore the role of the initial interview in occupational therapy and to evolve criteria for the initial interview that could contribute to treatment planning.

The study was considered important in that an understanding of the interview technique might facilitate the total treatment program of the individual patient and might assist the therapist in helping the patient set goals by aiding him in understanding and accepting his potentials and limitations.

It is recommended that the initial interview be studied in relation to the other fact-gathering devices. It is further recommended that the results of this study be tested to determine their potential as a systematized fact-gathering instru-

(*Continued on page* 106)

RELATIONSHIP OF MINNESOTA RATE OF MANIPULATION TEST WITH THE INDUSTRIAL WORK PERFORMANCE OF THE ADULT CEREBRAL PALSIED

RUTH D. DRUSSELL, M.A., O.T.R.

THE PROBLEM

It was the purpose of this study to evaluate manual dexterity performance, as shown by the Minnesota Rate of Manipulation Test, in relation to job performance ratings on the United States Employment Service Descriptive Rating Scale, to determine whether there is any correlation between the results of the test and the industrial work performance ratings of the adult cerebral palsied.

METHOD OF PROCEDURE

The research was conducted at the United Cerebral Palsy Center of Los Angeles County which has an occupational therapy department, where pre-vocational testing and evaluation is given, and an industrial production training program, with the purpose of having the trainees eventually work in industry. To determine eligibility for the training workshop, there was a social service interview, medical examination, psychological evaluation, occupational therapy evaluation and job reality testing.

The work performed in the workshop consisted of completion of subcontracts from industrial concerns, mainly the aircraft industry, in or near the Los Angeles area. Job assignments included sorting of parts, packaging of materials, cutting and soldering wires, drill press operation, assembly of small parts, drill point grinding, riveting, electrical assembly, harness lacing and other related work tasks.

The trainees were paid by the hour according to a wage scale established in the workshop, which was comparable to industry's wages for similar work. Since the completed parts and assemblies were used in industry, industrial standards for work performance were necessary. When a trainee was placed in a job in industry, it was generally similar to the job assignments while in the training program, and he had to be able to perform according to the training program standards before he was recommended for private employment.

The basis for selection of the group studied was active full-time participation in the industrial workshop training program for at least three months. The population consisted of thirty-two cerebral palsied adults, ranging in age from twenty to forty years, including twenty-three men and nine women. The selected group represented three-fourths of the trainees in the industrial training program.

MEASURES USED

The Minnesota Rate of Manipulation Test was selected as a gross manual dexterity test for which there are standardized norms for the non-handicapped population. Successful performance was dependent upon speed of gross hand and arm motions and not dependent on judgment of differences in size and shape or precision in eye-hand coordination. It was a test considered valid for semi-skilled factory operations involving wrapping, packaging and sorting of articles. There were two subtests: namely, Placing and Turning. The Placing subtest measured speed of hand manipulation and in this study was the only subtest used. The subtest consists of placing sixty cylindrical blocks of approximately 1½" in diameter into a board with corresponding holes large enough for the blocks to be easily dropped in. There was one practice trial and four timed trials with the total score being the score for the test.

Validity for the Minnesota Rate of Manipulation Test was probably as high for routine manipulation operations requiring hand and finger movement as any other test of this sort, and test-retest reliability according to Spearman-Brown formula was +.90.[1]

In the selection of a criterion with which to rate the on-the-job performance of the trainee in the training program, the United States Employment Service Descriptive Rating Scale[2] was chosen as it was a scale widely used in industry throughout the United States. This was a rating of job performance based on the judgment of the raters. The scale consisted of nine items (subscales) of work performance: (1) work speed, (2) work quality, (3) accuracy, (4) job knowledge, (5) aptitude, (6) ability to handle a variety of jobs, (7) resourcefulness, (8) offering practical suggestions, and (9) over-all satisfactory work performance. There was a scale of rating for each item ranging from one (low) through five (very high). The total rating was the sum of the item ratings.

*An abstract of a thesis presented to the faculty of the Graduate School, University of Southern California, in partial fulfillment of the requirements for the degree of master of art (occupational therapy).

CHARACTERISTICS AND DATA OF GROUP STUDIED

Trainee	*Age*	*Sex*	*Hand Dominance*	*Education (years)*	*Physical Involvement*	*Length Training** UCP Center*	*Previous Work Experience*	*Tests Given Before Admittance at Center*	*MRMT Scores*	*USES Scores*
1	34	M	L	8	Spastic quad, mod up, sev. lower	9 mos.	Shelt, priv.	GATB, Psychological	357	37.7
2	21	F	R	12	Ataxia mild, quad, tremor	6 mos.	Sheltered	GATB, Domestic, phys. eval.	420	26.0
3	25	F	R	10	Athetoid quad, mild, sl. spasticity	1 yr.	Private	GATB, ADL, filing	344	33.4
4	22	M	R	11	Spastic hemi, left. mod.	2 yr. 9 mos.	None	GATB, ADL +	292	30.9
5	21	M	L	12	Spastic tri., sev. lower	1 yr. 10 mos.	None	GATB	226	41.0
6	26	F	R	12	Spastic-tension athetoid, quad.	3 yr.	Shelt, priv.	GATB, ADL +	302	23.1
7	32	M	R	11	Spastic-ataxia, mod.	10 mos.	None	GATB	305	27.0
8	20	M	R	12	Athetoid quad, mild	8 mos.	None	GATB, Muscle test	327	24.0
9	21	F	R	11	Dyskinesia quad, mild	9 mos.	None	GATB, Muscle test	301	29.9
10	21	F	L	12	Spastic quad, mod, tremor	5 mos.	None	GATB	270	26.3
11	38	M	R	8	Spastic tri., mild	8 mos.	Private	GATB, ADL	265	43.1
12	27	M	R	ungraded	Athetoid quad, mod.	3 yr.	None	GATB, ADL +	420	32.6
13	25	M	R	12	Spastic quad, mod,	3 yr.	None	GATB, ADL +	375	30.6
14	31	M	R	5	Spastic quad, mild up, sev. lower	3 yr.	Shelt, priv.	GATB, ADL +	456	20.9
15	20	M	R	10	Athetoid quad, mild	1 yr.	None	GATB	322	32.2
16	39	M	L	12	Tension athetoid quad, mod.	10 mos.	None	GATB, ADL	492	19.3
17	20	M	R	9	Spastic hemi, left, mod.	1 yr. 6 mos.	None	GATB	231	41.1
18	21	F	L	12	Athetoid quad, mild	1 yr. 4 mos.	Sheltered	GATB, ADL, Phys. eval.	483	26.9
19	25	M	R	8	Spastic paraplegia, mild	2 yr.	Private	GATB, ADL	267	38.7
20	31	M	R	2 yr. col.	Athetoid quad, mild	3 mos.	None	GATB	372	26.1
21	22	M	R	12	Spastic paraplegia, sev. lower	4 mos.	None	GATB	301	28.5
22	26	M	R	2 yr. col.	Athetoid monoplegia, mod.	8 mos.	None	GATB	316	21.6
23	27	M	R	5	Spastic quad, mild	3 yr.	Shelt, priv.	GATB, ADL +	297	36.7
24	25	F	R	1 yr. col.	Spastic quad, mild, tremor	3 mos.	Private	GATB	299	23.0
25	40	M	R	8	Spastic quad, mod., tremor	5 mos.	Private	GATB	309	29.5
26	26	F	L	11	Spastic hemi, right, mod.	8 mos.	None	GATB	227	28.0
27	24	M	R	12	Dyskinesia quad, mild	4 mos.	Shelt, priv.	GATB, Muscle test	292	26.1
28	32	M	R	9	Spastic paraplegia, sev. lower	3 yr.	Private	GATB, ADL +	355	31.0
29	24	M	L	13	Spastic quad, mod.	2 yr.	None	GATB, ADL	681	37.3
30	22	M	L	7	Spastic hemi, right, mod.	3 mos.	None	GATB	291	25.2
31	36	F	R	14	Athetoid quad, mod.	3 yr.	Sheltered	GATB, ADL +	546	26.8
32	25	M	L	12/6 mo.trade	Spastic tri. right hand, legs mod.	5 mos.	Private	GATB	239	30.6
								Totals	10980	955.1
	26.5			10 yr. 5 mos.		1 yr. 4 mos.		Mean	343.12	29.85
								Standard Deviation	98.90	5.06

Correlation coefficient (r) = + .68

** From opening of Center, March 1954 to March 1957

* Early trainees-evaluated only by ADL; GATB given in 1957.

GATB—General Aptitude Test Battery, U. S. Employment Service

Table I

ADMINISTRATION OF MEASURES

Minnesota Rate of Manipulation Test. The placing subtest required the blocks to be picked up from the table and placed as quickly as possible into the holes of the formboard. Instructions for the test were given according to the testing manual, with the following exceptions: (1) "Are there any questions?" was added at the end of the instructions, and (2) the tester did the actual placement of the formboard before each trial in order to have it in correct position. One room within the United Cerebral Palsy Center was set aside for testing. The amount of lighting and area for testing was kept constant throughout the testing. The trainees were asked to stand during the test with the exception of three who were unable to do so because of lower extremity involvements. The initial testing was undertaken in March, 1957, and was completed in five days. The test was administered by the author of this paper.

United States Employment Service Descriptive Rating Scale. Three workshop instructors and supervisors of the training program rated the trainees according to this scale. The raters had observed the performance of the trainees on the average of twice a day during a three-month period. In order to acquaint the raters with the scale, a trial run was made by having them rate three trainees independently. The results were discussed with the raters, the psychologist and this author. The raters then rated the thirty-two trainees in this study; a sheet of suggestions to the raters was included with the scale and the raters were instructed to consider this carefully in their evaluations. Suggestions included: (1) judgment should not be affected by general impressions or an outstanding trait, (2) compare the trainees with each other, (3) rate all workers on one question at a time, (4) rate fairly although one trainee may not have worked as long as the others. and (5) rate only according to the abilities listed on the rating scale. In addition, the raters were advised not to discuss their decisions with each other.

The rating was completed in one week in June, 1957.

PRESENTATION OF DATA

Although thirty-three trainees were evaluated, only thirty-two were included in the statistical computation. (Table I). The thirty-third person scored lowest in both units of measurement (Minnesota Rate of Manipulation Test=1493, Descriptive Rating Scale=13.9). It would appear that the extent of his physcial involvement prevented him from obtaining valid results.

The study was, therefore, based on the remaining thirty-two trainees ranging in age from twenty to forty with a mean age of twenty-six and one half years. Education ranged from ungraded to two years of college, with a mean of ten years and five months. Length of training at the United Cerebral Palsy Center covered from three months to three years, with a mean of one year and four months. Seventeen had been in training at the Center less than one year, five for one year and over, and ten had been at the Center for two years and over.

It is interesting to note that eight trainees who had been in the training program the longest (two years and nine months to three years) were admitted when the Center started and had only received activities of daily living testing upon admittance, since no other formal testing had been given at that time. However, to date, all trainees had received the general aptitude test battery, and seven trainees had received additional testing.

Previous work experience indicated that seventeen trainees had no previous experience, while fifteen had worked in a sheltered or private situation. Physical involvement ranged from mild to moderate, with four severely involved in the lower extremities. None of the trainees had previously received the two instruments of measurement which were given as part of this study.

Five of the group that ranked highest on the Minnesota Test also ranked highest on the Descriptive Rating Scale. These five trainees were able to proceed without additional direction on the Minnesota Test, although Trainees 23 and 19 had difficulty in grasp and placement, which apparently did not affect their speed to a great extent

Trainee 29 had difficulty in handling the blocks, reversing order of placement and understanding direction of the Minnesota Test. However as to actual job performance he rated high on the Descriptive Rating Scale because he was considered a slow but satisfactory worker.

Although Trainees 6 and 24 ranked high in the Minnesota Test, they ranked low on the Descriptive Rating Scale because they were described as unresourceful and as doing only fair work, with low aptitude and limited work knowledge.

Trainee 26 ranked high on the Minnesota Test but ranked slightly below average on the Rating Scale, with low scores on aptitude, work variety and practical suggestions.

Trainees 14 and 16 ranked lowest in both the Minnesota Test and the Descriptive Rating Scale. These two trainees ranked lowest on all nine items of the Rating Scale, especially on speed. There were sixteen trainees within one standard deviation above and below the means.

Table II gives the rank distribution scores of the Minnesota Rate of Manipulation Test in comparison with the Conversion Table given in the

RANK DISTRIBUTION OF SCORES COMPARED WITH MINNESOTA RATE OF MANIPULATION TEST NORMS[3]

Trainee	*Score*	*Per Cent Placement*	*Quartile*	*Percentile*
5	226	54.5	+1	62.0
26	227	54.0	+1	61.0
17	231	51.0	+1	53.0
32	239	46.0	—1	39.0
11	265	30.0	—2	9.0
19	267	29.0	—3	8.0
10	270	27.0	—3	6.0
30	291	14.0	—4	.76
4	292	13.0	—4	.63
27	292	13.0	—4	.63
23	297	10.0	—4	.35
24	299	9.0	—5	.29
9	301	7.5	—5	.21
21	301	7.5	—5	.21
6	302	7.0	—5	.19
7	305	5.0	—5	.12
25	309	2.5	—5	.07
22	316			
15	322			
8	327			
3	344			
29	355			
1	357			
20	372			
13	375			
12	420			
2	420			
14	456			
18	483			
16	492			
31	546			
29	681			

Below line scores not on norms in MRMT Test Manual

Per cent placement indicates the quartile distribution. Every ten per cent is one quartile. Indicates point where individual ranks between slowest and quickest.

Percentile expresses the per cent of total population surpassed.

Per Cent Placement	*Interpretation of Speed*
Above 75	Extremely rapid. Exceptionally proficient speed.
60 — 75	Very rapid. Do well in occupation where speed.
50 — 60	Upper average speed. Able to keep up with speed with effort and interest.
40 — 50	Lower average speed. Occupation where speed not major item.
25 — 40	Very slow. Occupation where speed not necessary.
Below 25	Extremely slow. Unusually deficient in speed.

Table II

test manual, which is based on the non-handicapped population norms. The three highest scores (226, 227, 231) rank in the +1 quartile or within the fifty to sixty percentile of the non-handicapped population norms. The balance of the scores are in the -1 quartile and below with a percentile range from thirty-nine percent to zero percent of the non-handicapped norms. The Minnesota Test manual indicates that those below the twenty-fifth percentile of the non-handicapped norms should be employed in an occupation where speed is not a necessary item.

In interpreting the observations made during the administration of the Minnesota Rate of Manipulation Test, the following was noted:

1. *Understanding directions.* Eleven trainees were able to proceed without additional direction. The remaining twenty-one had to be shown procedure by actual block placement.

2. *Difficulty in coordination, grasp and block placement.* Eleven had difficulty in picking up the block and placing it into the hole correctly.

3. *Reversed order and improper placement.* Ten were in this classification. The usual error was in placing Block 1 into Space 4 of the formboard, or going across the top row of holes from right to left.

Analysis of the items on the Descriptive Rating Scale indicated that the highest ratings were made on Item B (Quality) and D (Job Knowledge). Items C (Accuracy), E (Aptitude) and I (Overall Work Performance) rated second. Resourcefulness, Work Speed and Variety of Work ranked third. The lowest total rating was on Item H (Practical Suggestions).

SUMMARY AND DISCUSSION

It was the purpose of this study to evaluate manual dexterity performance, as shown by the Minnesota Rate of Manipulation Test, in relation to job performance ratings on the United States Employment Service Descriptive Rating Scale, to determine whether there was any correlation between the results of the test and the industrial work performance ratings of the adult cerebral palsied.

Statistical data derived from a study of thirty-two cerebral palsied adults, in training at an industrial production training workshop, indicated a positive correlation of +.68 between the scores on the Minnesota Rate of Manipulation Test and the ratings on the Descriptive Rating Scale. This correlation was significant at the .01 level, meaning that only one time in one hundred trials would this correlation appear. A reliability coefficient of +.97 for the Minnesota Test was calculated by the split-half method. The rank order reliability coefficient of the raters on the Descriptive Rating Scale was determined as a mean of +.73.

The five trainees who ranked high in both units of measurement were in the +1 quartile or within the fifty to sixty percentile of the non-handicapped population norms. These trainees showed high performance on all nine items of the Descriptive Rating Scale but especially on speed, which was a determining factor in the score on the Minnesota Test.

Eight of the trainees who entered the training program when the United Cerebral Palsy Center was established in 1954 were still with the training program at the time of this study. This would

(*Continued on page* 105)

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Playskool Mfg. Co., 1750 N. Lawndale, Chicago, Ill.

"Polio Living," 12 Ryan Dr., Bloomington, Ill.

Polk Model Craft Hobbies, 314 Fifth Ave., New York, N.Y.

Porta-Rest Typewriter Tables, Cassopolis, Mich.

Pratt Hewes, 35 Emerson Ave., Floral Park, N.Y.

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J. A. Preston Corp., 175 Fifth Ave., New York, N.Y.

Price Industries, Ltd., 309 Main St., Akron 8, Ohio

Prince Rubber Co., Inc., 889 Niagara St., Buffalo 13, N.Y.

Profitkrafts Co., 4506 Lorain, Cleveland, Ohio

Prudential Products, 305 McClatchy Bldg., Upper Darby, Pa.

Pyrotex Leather Co., Leominster, Mass.

Rainbow Crafts, Inc., 2815 Highland Ave., Cincinnati 12, Ohio

John Rauschenberger Co., 423 N. Plankinton Ave., Milwaukee, Wis.

Winogene Redding, 67 Winthrop Ave., Wollaston, Mass.

Redi-Cut Crafts, 2814 N. 48 St., Milwaukee 10, Wis.

Reed Loom Co., Springfield, Ohio

Rehabilitation Products, Division of American Hospital Supply Corporation, 2020 Ridge Avenue, Evanston, Ill.

Relaxing Specialties Corp., 29-46 Northern Blvd., Long Island City, N.Y.

Rembrandt Graphic Arts Co., Stockton, N. J.

Remeedi-Aids Service, 44 Court St., Brooklyn, N.Y.

Republic A-just-a-shelf Div., 1680 Jefferson Ave., Buffalo 8, N.Y

Revell, Inc., 4223 Ocean Park Ave., Venice, Calif.

Reynolds Metals Co., 2500 S. Third St., Louisville, Ky.

Rit Products, P.O. Box 554, Indianapolis, Ind.

Robin-Aids, Mfg. Co., Box 101, Vallejo, Calif.

Rohm & Haas, 222 W. Washington Sq., Philadelphia, Pa.

Rosemont Silk Co., 10 W. 33 St., New York, N.Y.

S & S Leather Co., Colchester, Conn.

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W. B. Saunders, Philadelphia, Pa.

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Sightless Enterprises, Inc., Canton 2, Ohio

Skil Corporation, 5033 Elston Ave., Chicago, Ill.

Jane Snead Ceramics, 1822 Chestnut St., Philadelphia, Pa.

South Bend Lathe Works, 425 E. Madison St., South Bend, Ind.

Special Services, Inc., Farmington, Conn.

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Sperti Faraday, Inc., Adrian, Mich.

The Spool Cotton Co., 745 Fifth Ave., New York, N.Y.

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Tandy Leather Co., P.O. Box 791, Ft. Worth, Texas

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Theracycle, Route 3, Farmington, Mo.

Thera-Plast, 154 Nassau St., New York, N.Y.

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Thomas C. Thompson Co., Highland Park, Ill.

Chas. A. Toebe Leather Co., 40 N. Third St., Philadelphia 6, Pa.

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Vis-A-Lens, Inc., 530 E. Bainbridge St., Elizabethtown, Pa.

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Winkle Manufacturing Co., 3751 Montgomery Rd., Cincinnati, Ohio

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Wissahickon Yarn Co., Jenkintown, Pa.

Woodcraft Hobby Stores, Lake St. at Bryant Ave. S., Minneapolis, Minn.

Woodcrest, Inc., P.O. Box 675, Bellevue, Wash.

Workshop School for Writers, 521 Fifth Ave., New York 17, N. Y.

World Wide Games, Radnor Rd., Delaware, Ohio

X-acto, Inc., 48-411 Van Dam St., Long Island City 1, N.Y.

Yankee Peddler Hooked Rug Studio, 68 Haywood St., Greenfield, Mass.

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Have You Tried?

The new miracle material used in Densifoam Gym Mats by J. A. PRESTON CORP. absorbs impact and provides the degree of firmness desired in gym mats. Densifoam mats of one inch thickness are superior in shock absorbency to four inch conventional mats, are light weight and easy to handle and are economical. The mats are easily cleaned because Densifoam is completely impervious to water, perspiration and oils.

* * *

Three entirely new and original cloths—"Graphcloth," "Bungalow" cloth and "Chequers" cloth are described in the 1959 catalogue of NOTTINGHAM HANDCRAFT COMPANY.

CRAFTOOLS, INC., announces a new series of Instructional Wall Charts and Work Sheets. These charts, sixteen by twenty inches, present a graphic, illustrated step-by-step visual aid for the creative crafts and arts.

The first series include: Basic Process of the Lithograph; Basic Process of Etching; Basic Process of Wood Cuts and Wood Engraving; Basic Process of Linoleum Cutting; Basic Process of Throwing on the Potters Wheel; Basic Process of Bookbinding; Basic Process of Sculpture; and Cleaning the Shop.

A set of charts and work sheets will be distributed free of charge to institutions requesting them on their letterheads. Individuals may purchase a set of charts at the price of $2.00 and a set of eight Work sheets at the price of $.80.

* * *

Any make or model passenger car that is factory equipped with automatic transmission and power brakes may be easily converted to hand control by the addition of one of the new Finger-Tip Control kits by SAFETY-MAGIC SALES COMPANY, suppliers of handicap equipment for the past eight years. Cars that are not factory equipped with power brakes may be accommodated by first installing the factory recommended power brake kit.

Simplicity of operation is the keynote of the new controls, since a short movement of only one hand lever spans the range from full power to full brake. Very little effort is required to hold the lever at cruising power, yet it will return safely to neutral from either power or brake position if released. It is conveniently near the rim of the wheel so that both may be controlled

with one hand on straight stretches, leaving the other hand free.

* * *

Sax Brothers proudly presents a unique loom by Kessenich called "The Champion." This 2-harness loom, made of Wisconsin cherry, is laminated to avoid warpage. The corners are all rounded to prevent sharp edges, and constructed so the loom will take rugged use.

The feature of this loom is it can be folded to 16 inches for transporting from place to place and easy storage.

The weaving space is 14 inches, but the Champion is so made that the manufacturer can set it up for 20 inches at a small additional cost.

The Champion stands 29 inches high, and when it is ready for operation, it is at normal chair height. While the standard construction is for foot control, there is also provision for converting this loom to hand control as well as foot control.

The wood is lacquer finished. The lines are beautiful—clean—and in good design.

* * *

NOTTINGHAM HANDCRAFT COMPANY has recently introduced a new type of potters' wheel which features a stove-enamelled, three-position slip tray. In their 1959 catalogue they also announce an entirely new range of stainless steel pottery tools of original shape, especially designed to meet the needs of occupational therapists.

* * *

The Handy Carve Wonder Tool from TANDY LEATHER CO. performs all of the basic leather carving and stamping functions. Held like a pencil, the tool produces carving results without the necessity of pounding with a mallet.

A recently developed adhesive for paper, made of plastic rubber compounds, is now being marketed in dry bar form, called DRY-stik. When rubbed on a surface, it leaves a thin coating that is not sticky to the touch. The paper sticks instantly at fingertip pressure, yet it can be picked up and moved many times; when smoothed down firmly, it forms a waterproof bond that is stronger than the paper itself.

This dry bar is a uniquely effective rubber cement as it bonds tight at the edges and does not strain, wrinkle or shrink the paper. A stick can be kept on desk top or even in a pocket, and is always instantly usable and conveniently clean.

New office methods are achieved by using a dab of DRY-stik as an invisible paper clip; instant binding of letters into file folders without clasps or punching holes; posting bulletins without thumb tacks. Available at stationery, art and photo suppliers, DRY-stik is now also supplied to interested readers by the manufacturer, DRY-stik Co.

* * *

A unique crutch weighing only 20 ounces and featuring a pivot-type, plastic cuff permitting the user to open doors, answer phones and perform similar operations without setting the crutch down has been developed by the HOLLIDAY CO., Inglewood, California.

The patented forearm cuff, from Cycolac, an extremely tough, yet, resilient plastic material for maximum strength and comfort, pivots on the shaft following the natural movement of the user's arm and automatically guides the hand back to the hand grip. Cuffs are available in small, medium and large sizes.

Hand grips are easily adjusted to individual user's position and locked by the Allen Screw. Length is adjustable from 30 to 46 inches.

* * *

PC 7605 Turn-a-Page turns magazine and book pages automatically and accommodates all sizes from large magazines down to small books. Pages can be turned forward or backward by the touch of microswitches which can be placed next to the patient if he can exercise movement. The Turn-a-Page is placed on the patient's lap, on a bed table

or a wheelchair tray. Special mirror kit attachment, available for iron lung patients, is twenty-four by twenty inches. Both are available from J. A. PRESTON CORPORATION.

* * *

A durable flat metal bender with four fixed mandrels for controlled bending, and a spiral twisting device that provides a simple method for locating and controlling the length and degree of a twist anywhere on a metal bar is sold as a kit for $15.00 by the CHARLES W. BARNES CO. They are called the Artisan Bender and Artisan Spiral Twister.

* * *

A stand-in table built for the use of adults is designed by W. R. HAUSMANN WOODWORK, INC. The table has an unusually large tabletop which is scratch and stain proof. The top raises and lowers automatically to the desired level by an hydraulically operated mechanism.

The patient is held securely in standing position by a sturdy back panel upholstered in plastic covered foam rubber. The back rest is easily inserted and adjustable after patient has entered the table.

* * *

Ambu-lift is a safe, multi-purpose invalid lifter which makes it possible to easily transfer a patient from wheelchair to car. The unit is secured to the car in a few seconds and when not in use may be placed in the trunk or on the back seat of the car. The distributors, KAL-AVERY EQUIPMENT CO., also have a bath adaptor for their Ambu-lift.

* * *

CLEVELAND CRAFTS now offers beeswax foundations for making candles. These foundations are embossed with the honeycomb pattern and come in thin sheets 7½" wide, 16" long. You can make candles without melting the wax—just place wicking at the edge of honeycomb foundation and roll it right into the wax. A 16" tapered candle of extreme beauty can be made for as little as 10c.

Lots of occupational therapists are wondering where to obtain this material that is such a wonderful medium for their work. Cleveland Crafts has added this material to their very comprehensive line of handicraft supplies and will be glad to send you their complete catalogue at no charge.

Patients will be fascinated at the simplicity of using the Rayonette stole magic distributed by LEE ADVERTISING SPECIALTY CO. The material is low in price and takes little time to put to use. Some of the items made from it are baby blankets, stoles, hot pads and afghans.

* * *

A sewing project that provides patterns for making fabric slip covers for boxes of Kleenex tissues now is available to occupational therapists. Designed primarily as a teaching aid for girls from grades six to twelve, the kit contains a set of 12 decorative patterns, each of which is fun to make and grand for gifts.

The patterns illustrate basic sewing principles that are essential for future sewing success. Such steps as measuring, basting, finishing edges and binding are covered with simple step-by-step directions. In addition, the various patterns aid in teaching fabric grains, how to miter corners, make bows and even sew on buttons.

This master set of 12 slip cover designs is available free by writing to: Educational Department, KIMBERLY-CLARK CORP.

* * *

A new type of seven-inch scarf loom and fifteen-inch hospital bed loom made by NOTTINGHAM HANDCRAFT COMPANY features plastic heddles and is designed for juniors or patients needing light work on looms.

Industrial Work . . .

(*Continued from page 96*)

emphasize the importance of testing and evaluation since in 1954 no formal testing was given with the exception of activities of daily living evaluation. Manual dexterity testing at that time might have been of valuable assistance in showing that these trainees would not be able to profit enough from the training available at the Center to secure independent employment.

Since the highest total ratings on the Descriptive Rating Scale were on quality and job knowledge, it would appear that these work qualifications are very important in the training program.

In using the Minnesota Rate of Manipulation Test for evaluation of the cerebral palsied adult, norms would apparently be lower than for the non-handicapped population. New norms would have to be established by testing large samples of cerebral palsied adults throughout the United States.

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Initial Interview . . .

(*Continued from page 92*)

ment in patient evaluation. It is also recommended that the initial interview be explored as a fact-gathering instrument in settings of occupational therapy other than that of physical disabilities.

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Reviews

SOCIAL SECURITY FOR THE DISABLED. Arthur B. Price, M.D. *Archives of Physical Medicine and Rehabilitation.* 39:2 (February) 1958.

For the first time in 1954 and subsequently in 1956 Congress provided for the social security problems of the disabled person. These amendments to the social security law provided for protection against loss of retirement and survivor benefits because of reduced earnings to the long term disabled.

Applications for disability benefits are taken by social security administration district offices where help is given in filing for disability. These offices do not make evaluations of disability. Disability is determined by the state agency physicians from the medical report of the applicants' own physicians.

—Janet L. Werner, Lt., AMSC.

REHABILITATION FOR LIVING. Marton Hoberman, M.D., and Benjamin H. Lipton, M.A. *Archives of Physical Medicine and Rehabilitation,* 39:2 (February) 1958.

The Joseph Bulova School of Watchmaking reviewed the physical and vocational status of the 186 graduates with spinal cord injuries, tuberculosis and cardiac disease. The data was obtained through a questionnaire followed by a personal visit or phone call.

Medical data showed that rehospitalization was lower in the tuberculosis and cardiac graduates than in the paraplegic graduates. It is thought that this may be due to the paraplegics' indifference to routine medical care since only nine paraplegics received routine medical care while 85% of both the cardiac and tuberculosis graduates had periodic examinations. In all groups, conditions related to the original disease were the chief cause of rehospitalization.

Vocational data showed that 85 of the 88 paraplegics are employed while all of the tuberculous and cardiac graduates are employed. Most of the graduates in all three groups are working full time and utilizing their learned skill. Average earnings range from $4,100 for paraplegics and $4,300 for tuberculosis graduates to $4,700 for cardiac graduates. Although many of the graduates were receiving pensions, they showed no lack of motivation for supporting their families. Many do watch repair in their spare time at home.

—Janet L. Werner, Lt., AMSC.

OCCULT FRACTURES. Rudolph S. Reich, M.D., and Norman Rosenberg, M.D. *The Journal of the American Medical Association,* 166:6 (February 8) 1958.

This article discusses occult fractures primarily in terms of diagnosis and defining an occult fracture as one "which gives clinical signs of its presence yet cannot be demonstrated by X-ray examination until reparative changes have occurred."

In cases of fractures clearly evidenced by cardinal signs, the roentgenogram is only an aid to diagnosis by the clinician; however, a negative roentgenogram is not to rule out the possibility of a fracture, for any such false sense of security can be disastrous. The diagnosis is a clinical one.

Occult fractures that escape diagnosis and remain untreated can be the cause of much pain, anxiety, disability and expense. By the time the reparative changes have occurred, ligaments and other soft tissues may be involved; tiny particles of bone pulled loose by avulsed ligaments, may interefere. The treatment of occult fractures in a positive manner, through immobilization in plaster, is firmly urged by these authors.

—D.R. Street, Lt., AMSC.

REHABILITATION OF PERSONS WITH BILATERAL AMPUTATION OF LOWER EXTREMITIES. Arthur L. Watkins, M.D., and Sung J. Liao, M.D. *The Journal of the AMA,* 166:13 (March 29) 1958.

During a six and one-half year period (1950 through 1956), 50 patients with bilateral amputation of lower extremities were studied, from treatment to followup, at the Bay State Medical Rehabilitation Clinic in Boston. This paper reviews the effectiveness of a program of rehabilitation.

The rehabilitation program consisted, in these cases, of preprosthetic training, activities of daily living, prevocational evaluation and guidance, and job placement when indicated. The minimal goal was self-sufficiency in self-care, in the independent use of the prosthesis by the patient.

Analysis of these cases in terms of rehabilitation end-result revealed that the factors of age, etiology, or amputation site were not the most significant factors, nor was the interval between surgery and prosthetic training. Success appeared most dependent on the factor of motivation. After appropriate training, 70 per cent of the patients were considered rehabilitated, with 30 per cent economically independent. Only 30 per cent were considered failures, presumably from lack of motivation and/or presence of severe medical complications.

—D. R. Street, Lt., AMSC.

SPECIFIC MANAGEMENT FOR LUMBAR AND SACRAL RADICULITIS. Frederic B. House, M.D., and S. J. O'Connor, M.D. *The Journal of the AMA,* 166:11 (March 15) 1958.

This article stresses the need for the recognition and practice of a specific conservative program for the care of "hyperextension derangements" of the lumbar spine, associated with compression or irritation of the lumber or sacral nerve roots. The preventive aspects of low back disease also receive consideration.

Types and causes of the disorder are reviewed. The sydrone is identified by the presence of low back pain radiating down the course of the sciatic nerve. Fre-

quently there is present erector spinae muscle spasm, local tenderness, loss of tendon reflexes, and possible sensory and motor defects. Of the various pathological conditions which may cause this syndrome, one characteristic is held in common: an encroachment upon the neural foramen by forces tending to tilt vertebral bodies posteriorly, resulting in the noted compression or irritation of lumbar or sacral nerve roots. Causes discussed are five: facet syndrome, asteophytosis of the spine, spondylolistheses, extrusion of intervertebral disk, and lumber laminectomy.

A method of conservative treatment is outlined as practiced in a general community hospital. An exercise program found to be logical and effective is given in five steps, graded from bed position, to standing position, to ambulation, to specific occupational postural problems. Of 247 patients with this back condition, treated in 1956, only seven per cent failed to respond to the conservative program, and subsequently underwent surgery.

—D. R. Street, Lt., AMSC.

THE EFFECTS OF SEVERE CRIPPLING ON THE DEVELOPMENT OF A GROUP OF CHILDREN. Ednita P. Bernabeu. *Psychiatry*, 21:2 (May) 1958, pp. 169-94.

This paper reports a psychotherapeutic study of problems in the development of children hospitalized for severe sequelae of poliomyelitis. Eight case histories of children ranging in age from four and a half to fifteen are presented. The findings are applicable to other areas of physical disabilities and psychiatry.

The bulk of the paper is concerned with the main psychological reactions to crippling: frustration, anxiety, aggression and guilt. A variety of defense mechanisms are martialed against these anxieties. Those discussed are *denial*, *projection* and *introjection*, *isolation*, *repression*, *suppression*, *regression* and *sublimation*. *Regression* stands out as particularly important because of its impact on physical treatment, which it can seriously hamper.

Of particular interest to occupational therapists is a statement of the necessity for devising types of play which can satisfy these children's intense needs for motor outlets for activity and aggression.

—June L. Mazer, O.T.R.

DIAGNOSIS, PROGNOSIS AND REHABILITATION IN PATIENTS WITH APHASIA. Earl Hoerner, M.D., and Betty Horowitz. *The Journal of the AMA*, 166:13 (March 29) 1958.

It is the purpose of this paper to clarify the methods and benefits of working with asphasic patients within the framework of the general rehabilitation team set-up. Emphasis is placed on the language area although frequently an associated hemiplegia or hemiparesis exists. The concept of the whole person is stressed in retaining and rehabilitating procedures, with the individual's handling of environmental stress and stimuli dependent on the relationship of his physical and emotional abilities and social surroundings.

Early retraining has been shown to increase noticeably a patient's functional language ability and to aid in alleviation of accompanying depression and anxiety. Diagnosis is made in terms of involvement or impairment of cerebral functional areas as reflected in the language modalities of (1) understanding, (2) talking, (3) reading, and (4) writing. Classification is then made on the basis of receptive-type aphasia, expressive-type aphasia, mixed aphasia, or global aphasia.

Treatment goals are guided by the patient's functional language ability and capacity, thought of in terms of (1) basic communication, (2) home adequacy, (3) social acceptability, and (4) vocational adequacy. Therapeutic measures are carried out, within a comprehensive rehabilitation center, in speech and hearing units, nursing service, social service, physical therapy and occupational therapy. Although treatment media vary, each serve as mutual reinforcement towards a common goal.

—D. R. Street, Lt., AMSC.

RECENT ADVANCES IN CEREBRAL PALSY. Edited by R. S. Illingworth, M.D. Boston: Little, Brown and Company, 1958, 389 pp., $12.00.

This book is composed of fifteen chapters each written by a different expert in his field in the treatment of cerebral palsy. The authors are Australian, English and American. They review briefly the latest theories and practices in the diagnosis, education, psychological testing, orthopedic surgery, physical therapy (by Dr. Phelps), drug therapy, neurosurgery, etc., for cerebral palsy as followed in England today. Some of these practices are used in the United States but not all necessarily, so that a clinician in this field could pick up some useful ideas.

The material is interesting as it leads to comparison and contrasts with the ideas and methods followed in our own particular clinics.

—Adaline J. Plank, O.T.R.

MULTIPLE SCLEROSIS. Bernard Passer, B.S. *The Physical Therapy Review*, Volume 37, Number 9. September, 1957 .

Epidemiological studies on multiple sclerosis seem to indicate that the onset of symptoms occur most commonly between the ages of 20 and 40 years with an equal distribution in frequency among males and females. The disease is most commonly seen in the temperate and colder zones of this country.

Pertinent information on pathology, etiology, symptomology, onset and course of the disease is briefly summarized.

Dr. Passer reviews the results of the disease as it affects the patient and the effect which the symptoms of the disease may have on the family and community and their resulting reaction on the patient.

After a study of 354 multiple sclerosis patients who received a total of 4,820 treatments, a triple treatment program was developed. This program consists of histamine, antibiotics and physical therapy. Considerations for treatments of spasticity, muscle weakness, ataxia and incoordination are given, as well as for teaching of activities of daily living.

The article also stresses the importance of showing the patient that he is able to do something to help himself and that there are people who are interested in him.

—Maryelle Dodds, Major, AMSC, M.A.

TEACHING: A factor in functional training. Erbert F. Cicenia, Ed.D., and Morton Hoberman, M.D. *The Physical Therapy Review*, Volume 38, Number 4, April 1958.

The purpose of this paper is to help the therapists to understand basic educational principles and practices and to show how they may be applied to therapeutic situations in the functional training phase of physical therapy and rehabilitation. To teach functional activities most effectively, the physical therapist should have certain requisites consisting of: knowledge of subject, ability to deal with and understand people, ability to bring order and discipline to the learning process, and a thorough knowledge of the structure and functions of the body and the ability to apply this knowledge to his functional training teaching.

Teaching principles and methods are given in quite some detail to enable a physical therapist to help patients learn well and achieve lasting, usable and meaningful

results. Lastly, practical hints for actual teaching are given. These consist of showing the importance of explanation and demonstration of actual participation on the part of the patient, the effect of rewards and punishment on the learner and the importance of telling the patient what to do, rather than what not to do.

—Maryelle Dodds, Major, AMSC, M.A.

DO YOU NEED MALPRACTICE INSURANCE? Sidney Shindell, M.D., LL.B. *The Physical Therapy Review*, Volume 37, Number 10. October, 1957.

This article presents some basic principle of law to assist therapists to evaluate their need for malpractice insurance. Malpractice is defined as negligence in treatment. In order to have a legal suit, the patient must suffer an injury, show that the injury occurred as a result of something the therapist did or failed to do, then be able to show that the action or lack thereof was negligence on the part of the therapist. Even though the therapist may share the responsibility of treatment with other people, she is personally liable for her own acts and may carry responsibility for the acts of others.

The therapist must reduce the possibility of claims by maintaining the highest standards of practice and by keeping accurate records on each patient. If a claim should arise, a professional liability insurance policy can provide reasonable financial protection and give the therapist security of knowing that the risks of the profession will not have to be met unaided.

—Maryelle Dodds, Major, AMSC, M.A.

A PATIENT SOLVES OWN DROP FOOT PROBLEM. Vera R. Ford, M.A. *The Physical Therapy Review*, Volume 38, Number 7, July 1958.

This is a short account of how one patient was able to discard her short dropfoot leg brace by inserting lead in the posterior aspect of a leather shoe heel. The illustration and clear explanation make it possible to repeat the experiment on other cases of the same type.

The consensus of the physical therapy staff of the Orthopaedic Hospital, Los Angeles, where the work was done, was in favor of the weighted shoe, at least in this case, because it offered cosmesis, good gait and it eliminated supportive device.

—Maryelle Dodds, Major, AMSC, M.A.

PRINCIPLES OF RECORD KEEPING. Eleanor J. Carlin, M.S. *The Physical Therapy Review*, Volume 37, Number 6, June 1957.

Miss Eleanor Carlin first points out the professional importance of communication and scientific recording through good records. Selection of forms is discussed, considering brevity, clarity, design, content and the type of terminology most appropriate for the form. Suggestions are given for writing records and for making better use of the completed records.

The use and abuse of clinical records such as referral forms, progress notes and evaluation of records is considered in some detail, the latter with special emphasis on muscle testing and joint measurements. In the section on administrative records, one form is exemplified to demonstrate the type of information which can be made available through well planned records.

—Maryelle Dodds, Major, AMSC, M.A.

JUVENILE DELINQUENCY, Edited by Joseph S. Roucek. New York: Philosophical Library, 1958, 370 pp., $10.

The term "delinquency" is used somewhat ambiguously by many people when public attention is aroused by juvenile behavior problems. What constitutes a delinquent, from a legalistic viewpoint, varies from state to state, and this is one of the many topics discussed in this book. Fourteen leading authorities present their research studies on the increasing seriousness of juvenile delinquency; the work of juvenile courts, child guidance clinics, and social agencies; the psychiatric approach; statistical data on crime reports; types of delinquents and comparison of methods of dealing with offenses; international scope of the problem; environmental influences, e.g. urban versus rural areas, cultural background versus slum conditions, the effects of mass media (TV, radio, movies, comics), and the attempts by various communities to promote "delinquency prevention."

—Bertha J. Piper, O.T.R.

THE ETIOLOGIC SIGNIFICANCE OF EMOTIONAL FACTORS IN ONSET AND EXACERBATIONS OF MULTIPLE SCLEROSIS. G. S. Philippoulous, M.D., E. D. Wittkower, M.D., and A. Cousineau, M.A., *Psychomatic Medicine*, 20:6 (Nov.-Dec.) 1958.

It is generally agreed that multiple factors play a part in the causation of multiple sclerosis (MS). A review of the literature suggests a relevance of personality factors and of disturbing emotional experiences to some aspects of MS.

The purpose of this study was to show what kind of persons develop MS, and the effect of emotional disturbances on the onset, relapses and exacerbations of MS. Observations of the family history, early history and the premorbid personality of forty patients with MS were reported and compared with a carefully matched control group. The results showed that more often than due to chance, an unhappy childhood, rejection by both parents, and the erection of psychological defenses against the feelings of being rejected, have been outstanding features in the history of MS patients. Acute or chronic emotional disturbances frequently precede and apparently precipitate the onset of the disease, its relapses and exacerbations. MS is a disease that occurs frequently in chronically anxious individuals. No uniformity of personality type prior to the onset of MS could be detected.

—Marilyn S. Trainer, 1/Lt., AMSC.

REWEAVE IT YOURSELF. Virginia Saunders. New York: D. Van Nostrand Co., 1958, $4.95, 121 pp.

A detailed and well-illustrated text revealing the "secrets" of reweaving. This book should be of value to therapists in repairing mistakes in material and in teaching a new medium to patients. The book tells the equipment needed, where to obtain it and the procedures used in repairing various types of materials and weaves.

REHABILITATION: A COMMUNITY CHALLENGE, W. Scott Allan, John Wiley & Sons, Inc., New York, 1958, 247 pp.

A broad general text designed for the lay reader and for those professional workers who are not acquainted with current concepts of total rehabilitation. It includes philosophy and objectives, legislation, insurance plans, facilities, personnel, services, community responsibility, and costs of rehabilitation. As such it is an excellent book for board members.

No technical information is given, it does not pretend to be a "how-to" book. Well trained and practicing professional people in the field of rehabilitation will not find much new material here, in fact they will be well acquainted with the source material used. Their job of interpreting rehabilitation to the community, however, will be greatly facilitated by the use of this good general text written by the supervisor of medical services for the Liberty Mutual Insurance Company.

—Carlotta Welles, O.T.R.

AN INVESTIGATION OF THE RELATION BETWEEN LIFE EXPERIENCE, PERSONALITY CHARACTERISTICS, AND GENERAL SUSCEPTIBILITY TO ILLNESS. L. E. Hinkle, Jr., W. N. Christenson, F. D. Kane, Adrian Ostfeld, W. N. Thetford, and H. G. Wolff. *Psychosomatic Medicine*, 20:4 (July-Aug.) 1958.

Episodes of illness are not distributed at random among the members of the general population. Even among groups of similar ethnic and social background, the likelihood of becoming ill is different from person to person. It is the purpose of this study to explore some of the characteristics of people who have experienced a large number of illness episodes, and to compare them with similar people who have experienced few illness episodes, in order to illuminate some factors that may be responsible for differences in general susceptibility to illness.

A group of 100 Chinese were selected for this report because of the large amount of dislocation and social change which they had experienced. The members of this group exihibited differences in their general susceptibility to illness. Twenty-five per cent of the individuals experienced approximately fifty per cent of all episodes over a standard period of time.

The observations and conclusions drawn from the study of the life histories of this group showed that the lifetime environments and various life experiences of the group with frequent illnesses did not appear to be significantly different from the group with few illnesses, nor was there a significant difference between the two groups with regard to which members had realized their potentialities. The members of the two groups were notably different in the way in which they had perceived their lives and various situations which they had encountered. The findings suggest that the determinants of general susceptibility to illness are both genetic and environmental, but that the actual life situations encountered are less important in this respect than the way in which the situations are perceived.

—Marilyn S. Trainer, 1/Lt., AMSC.

THE CARE OF THE GERIATRIC PATIENT. Ed., E. V. Cowdry, Ph.D. St. Louis: C. V. Mosby Co., 1958, 417 pp., $8.00.

A basic reference book on geriatric care. Its comprehensive nature precludes detailed discussion but the chapter on "Rehabilitation of the Geriatric Patient" by Sedgwick Mead does not develop the concept generally desirable for occupational therapy. He seems to define occupational therapy as an extension of physical therapy rather than as a professional entity with advantages of media over the routine of physical therapy. Exception must be taken to lack of understanding of the potentiality of occupational therapy. Although he says occupational therapy is "one of the most valuable resources we have . . ." he gives little thought to its psychological value by stating, "There is little emphasis on completed work unless the patient is making a device for his personal needs . . ."

Unfortunately he prefers to have occupational therapists work in restrictive areas and neglect the broad concept that is the crux and value of occupational therapy.

THE ROLE OF THE PHYSICAL THERAPIST IN DISASTER PLANNING. Agnes P. Snyder, Lt. Col., AMSC. *The Physical Therapy Review*, Volume 38, Number 9, September 1958.

Nearly every area in the United States would be vulnerable in one way or another during a nuclear attack. The hazard of any disaster can be lessened by anticipating the possibility, safeguarding against it yet preparing for it.

The Federal Civil Defense Administration (FCDA) is charged with the responsibility of preparing for and dealing with disaster caused by enemy attack or the forces of nature. This organization can assist and advise the individual state civil defense agencies but each state is responsible for its own program. Working with the FCDA is a committee on disaster planning, appointed by the American Hospital Association, to explore the role to be played by hospitals in the event of a national emergency. This committee has prepared two handbooks: "Principles of Disaster Planning for Hospitals," and "Readings in Disaster Planning for Hospitals."

Colonel Snyder suggests that each professional member of the medical team become familiar with the material contained in each of the handbooks. She further suggests specific ways in which the physical therapist would be able to assist in the event of disaster, and ways in which the therapist might prepare for her role in the event of an emergency.

—Maryelle Dodds, Major, AMSC, M.A.

BALANCE TRAINING IN CEREBRAL PALSY: PRINCIPLES AND PROCEDURES. Helen C. Spencer B.A. *The Physical Therapy Review*, 37:8 (August) 1957.

The first part of this article deals with general considerations of balance training, such as the psychological and physiological reasons why balance training is more difficult in cases of cerebral palsy than in poliomyelitis or paraplegia. Overcoming patients' fear, aids in balance training, stimulating the interest of the patient, dealing with disturbances from outside sources and other factors are discussed.

The second part includes more specific procedures of balance training, not as an orderly system of exercises, but rather as balance training techniques for the therapist to have at his disposal. Techniques given in some detail are head and sitting balance, quadruped and kneeling activities, erect activities with and without support, and crutch and cane activities.

—Maryelle Dodds, Major, AMSC, M.A.

A REHABILITATION PROGRAM FOR THE TUBERCULOUS. Cornelia Lounsbury. *Journal of Rehabilitation*, May-June, 1958.

The Kings County Hospital Center in Brooklyn, N. Y., organized their rehabilitation program fourteen years ago. It included occupational therapy, diversional therapy, educational facilities, and counseling service.

The purpose of the program was (1) To help patients accept their disease and their long period of hospitalization, (2) To prepare patients for the responsibilities they must eventually assume after leaving the hospital. These purposes have been accomplished through the coordination of all services. The library program is important for all new patients; the adult education program aids patients who have been unable to complete their education or who must change their occupation; the recreation program is planned to help make the patient's stay in the hospital more pleasant and thus reduce the number signing out against medical advice; the counseling service is available to the patient in the hospital and at home during the first few months after discharge.

The occupational therapy division renders two important services. (1) It begins the patient's physical hardening process while he is still in the hospital. (2) It provides a means of evaluating a patient's vocational potentialities and work habits.

The rehabilitation department, working under the leadership of the medical supervisor, and in close cooperation with nursing, social service, and other divisions, has helped many patients to understand themselves better, to know where they stand in relation to their illness, and to take

stock of their strengths and weaknesses. Thus they have been able to gain a more realistic outlook and to make a satisfactory adjustment to the community.

—Minnie F. Witham, O.T.R.

THE ANALYSIS OF DREAMS. Medard Boss, M.D. New York: Philosophical Library, Inc., 1958, 223 pp., $6.00.

The author, a professor of psychotherapy at the University of Zurich, has presented diversified evaluations dealing with a complex human phenomenon. Covering the span of centuries, this work shows changing viewpoints, dating from the "divine commandment" beliefs, in days of philosophical antiquity, to the psychological theories encompassed in the "exact natural sciences" of the modern era.

Voltaire scoffed at dream evaluation, rating it as "superstitious nonsense." Cicero accepted dream experiences as "phenomena of physical stimuli." Freud's technical point of view ascertained that the dream is a "hallucinary fulfillment of an instinctual wish." Such instinctual needs, he believed, emerge from the combined physiological mechanisms of hunger and thirst and sex.

Numerous psychological studies are accounted for in the contents, including the "Zurich School" theories, E. Fromm's "neo-Freudian" analysis, and Jung's theory of symbols. Diagnostic interpretations of the dream experiences of various clinical cases are included in the work.

—Bertha J. Piper, O.T.R.

CRIME and INSANITY, Edited by Richard W. Nice. New York: Philosophical Library, Inc., 1958, 280 pp., $6.00.

Twelve experts from the fields of psychology, education, sociology, psychiatry, and jurisprudence deal with many vastly complicated legalistic problems. Provocative opinions are submitted concerning such issues as (1) basic formulas used in determining a defendant's capacity to know right from wrong, or to employ reason to restrain an act; (2) the involvement of mental disorders in the light of medical advancement; (3) forensic complications in distinguishing medical from legal nomenclature in trial procedures.

"The only states which seem to employ modern psychiatry and medicine, and have revised their laws to fit with modern scientific advancement, are Delaware and Massachusetts. Delaware revised their insanity laws in 1956 and Massachusetts has several revisions pending this year (1957)."

Information obtained from officials in several states, by questionnaires based on "the plea of insanity as a defense to a criminal act," is contained in the appendix.

—Bertha J. Piper, O.T.R.

THE NEW CHEMOTHERAPY IN MENTAL ILLNESS. Edited by Hirsch L. Gordon, M.D. New York: Philosophical Library, Inc., 1958, 762 pp., $12.00.

One-hundred and sixty-seven medical men have presented herein the results of their clinical experiences with the ataractic, (peace of mind) drugs. The extensive developments in the current use of "tranquilizing" and "energizing" therapies are well described in this wide selection of clinical studies.

—Bertha J. Piper, O.T.R.

ACTIVE THERAPY REPLACES CUSTODIAL CARE FOR GERIATRIC PATIENTS IN MENTAL HOSPITALS. Kurt Wolff, M.D. *Geriatrics*, 13: 3 (March) 1958.

At Osawatomie State Hospital the custodial care attitude toward geriatric patients in mental hospitals has been replaced by an active psychiatric treatment program. Included in the program are occupational therapy, use of tranquilizers, change of the hospital environment to a more "homelike atmosphere," and an improved psychiatric training program for nursing personnel. The program has resulted in increased enthusiasm and optimism toward treatment of the emotionally disabled geriatric patient, and has allowed an increased number of patients to be restored to an active, meaningful life outside the hospital.

—Isabel C. Hahn, 1st Lt., AMSC

CHEMOPALLIDECTOMY AND CHEMOTHALECTOMY FOR PARKINSONISM. Irving S. Cooper, M.D., Gonzalo J. Bravo, M.D., Manuel Riklan, Ph.D., Norman W. Davidson, M.D., Edmond R. Gorek, M.D. *Geriatrics*, 13:3 (March) 1958.

Chemopallidectomy and chemothalectomy, performed on a consecutive series of 600 patients over the last five years, has been found to give lasting relief from tremor, rigidity, incapacitation and deformity in over 80 per cent of properly selected cases of parkinsonism. The surgical technic is aimed at placing a surgical lesion in the globus pallidus or the thalamus, or both combined, in order to alleviate tremor and rigidity without paralyzing the patient. The procedure is as follows: a cannula is inserted into the brain in the region where the lesion is to be placed. A small balloon at the end of the cannula is then inflated, while the patient is conscious. This makes it possible to determine if the lesion to be made will actually alleviate the patient's symptoms. It also produces a small cavity in that region into which absolute alcohol can then be injected, producing a permanent neurolytic lesion.

The technic is most successful in patients who are physiologically young, whose disease has been progressing slowly, whose symptoms are relatively unilateral, and who are still able to function though somewhat incapacitated. It is contraindicated in patients with speech difficulties, organic mental deterioration, extreme physical debilitation, psychosis, excessive vegetative symptoms, and ordinary medical contraindications.

—Isabel C. Hahn, 1st Lt., AMSC

THE GANG: A STUDY IN ADOLESCENT BEHAVIOR. Herbert Bloch and Arthur Neiderhoffer. New York: Philosophical Library.

The authors hypothesize that the American society gang structure apparently satisfies deep-seated needs experienced by adolescents in all cultures. This volume is a beautifully prepared documentation of this theory. It includes description and analysis of adolescents in a variety of cultures. Up to date sociological and psychological reasons for the organization of adolescent groups are also indicated. A detailed case study is added to confirm the hypothesis.

This is a good thought-provoking book for all responsible citizens—including occupational therapists in general—since the authors believe American gangs are the result of a deficiency in our society which does not make adequate preparation for induction of our adoles-

cents to adult status. Those of us with a special interest in adolescent behavior will find it one of those well written, stimulating books that is hard to put down.

This study will be useful to therapists both as a reference and in various teaching functions. Surely some therapists will want to include it in their own libraries.

—Barbara Locher, O.T.R.

FOSTERING THE INVOLVEMENT OF THE PSYCHIATRIC PATIENT IN GROUP ACTIVITIES. D. Wells Goodrich, June Mazer, and Betty Cline. *Psychiatry: Journal for the Study of Interpersonal Processes*, 21:3 (August) 1958, pp. 259-68.

This is the study which prompted the article by Mazer and Goodrich, "The Prescription" (*AJOT*, 12:4, July-August, pp. 165-70).

The investigation focused on the problem of how patients get involved in activities and what specific issues face the activity therapist in fostering this involvement. Their research method includes recording, group discussion and analysis of episodes from daily work life. The discussion is organized around four major problem areas.

"Mediating between the needs of the individual and the group" requires great skill on the part of the activity therapist, who must intervene in varying appropriate ways to permit maximum participation without sacrificing the group. It is often desirable to have two or more therapists working together on one activity.

How much to intervene and the difficulties of the dual role of participant and leader are considered in the discussion, "Knowing when to assume and relinquish responsibility." The activity therapist must be aware of the momentary motivational level and activity level of each of the patients, and be ready to shift his leadership role accordingly.

Though experience shows that "providing a clear, definite structure for the patient-activities therapist relationship" is desirable, the problem remains how best to provide this structure. Physical arrangement of objects, defining roles with activities, structuring roles verbally, and differentiated roles within activities are discussed.

"The involvement power of activities and group situations" suggests that proper planning of activities to occur together may be used by the therapist as a means to encourage patient participation. "The influence of the unconflicted upon the conflicted" must also be reckoned with.

Concrete examples of situations with patients are used throughout the discussions as illustrative material.

—Joan Doniger, O.T.R.

MILIEU AND ACTIVITY THERAPY WITH CHRONICALLY DISTURBED FEMALE PATIENTS. James F. Suess, M.D. *The Psychiatric Quarterly*, 32:1 (January) 1958.

A program is reported in which vigorous physical activity and milieu therapy is used in the "last ditch" treatment of chronically disturbed women, for whom more conventional therapies, including ataractics, have been unsuccessful. The specific activity is the digging up, screening, and washing of sand and gravel from a pit on the hospital grounds. The sand and gravel is later used in making improvements to the hospital. Both male and female attendants supervise.

Benefit is derived from this activity in several ways. One is the opportunity for release of energy, discharge of guilt, and externalization of hostility through heavy physical exertion. Another is the opportunity for a therapeutic relationship with people, in which the patient becomes aware of her status in a closely coordinated, productive group, and sees evidence of her usefulness in the result of the work. Still another is the opportunity for a therapeutic relationship with people, in which the patient becomes aware of her status in a closely coordinated, productive group, and sees evidence of her usefulness in the result of the work. Still another is the opportunity to satisfy emotional needs through interaction with the attendants who represent healthy male and female authority figures for the group. The program is successful clinically in that 97 per cent of the patients have shown varying degrees of improvement, with 14 per cent being able to return home. It has been well received by attendants, patients, and relatives, and is now a permanent part of the hospital's industrial therapy program for women.

—Isabel C. Hahn, 1st Lt., AMSC

CHLORPROMAZINE USED WITH AN INTENSIVE OCCUPATIONAL THERAPY PROGRAM. Patricia Gfygier, and M. A. Waters, M.B. *Archives of Neurology and Psychiatry*, Volume 79, Number 6, June 1958.

Matched groups of female chronic schizophrenics were given either chlorpromazine or placebos while under an intensive program of occupational and social activities. After 12 weeks the intensive activity program was discontinued, but the chlorpromazine-placebo regime continued another 12 weeks. Patients were rated as to behavioral improvement during both the first and the second 12 weeks' periods. At the end of the first 12 weeks all patients showed considerable improvement. Those receiving chlorpromazine showed a slight but statistically significant superiority over those receiving placebos. This superiority was still significant but less marked at the end of the second 12 weeks. Age and duration of illness were found to be important factors in predicting behavioral improvement, both being negatively correlated. It was concluded that chlorpromazine is useful as an adjunct to a therapeutic program with chronic schizophrenics, and when thus used seems to have a greater effect on the speed than on the final level of improvement.

—Isabel C. Hahn, 1st Lt., AMSC

REHABILITATION AFTER ILLNESS AND ACCIDENT. Edited by Thomas M. Ling, M.D., M.R.C.P., and C. J. S. O'Malley, C.B.E., M.B. London: Tindall, and Cox. Baltimore: Williams and Wilkins Co. 1958, $3.50 119 pp.

According to the editors, this book is perhaps the first comprehensive attempt published in England on rehabilitation. Eight contributors associated with St. Thomas Hospital have written chapters on the medical, surgical, psychiatric, social, administrative and therapeutic aspects of rehabilitation. An interesting narrative on resettlement and rehabilitation legislation gives the reader some insight into England's national health program.

Barbara M. Stow, the author of the chapter on occupational therapy emphasizes the occupational therapist's role in finding the patient's capabilities, both physically and mentally, with the view to fitting him either for his original job or for resettlement and retraining in a new one.

The book is somewhat condensed for a comprehensive book on rehabilitation, but it may serve as a helpful

source to England's physicians, therapists, social workers and disablement resettlement officers who are becoming aware of the importance of rehabilitation.

—Lester M. Brower, M.A., O.T.R., R.P.T.

OCCUPATIONAL INFORMATION, WHERE TO GET IT AND HOW TO USE IT IN COUNSELING AND TEACHING. Robert Hoppock. New York: McGraw-Hill Book Co., Inc., 1957, $6.75, 534 pp.

This textbook is for use in training of counselors, teachers, psychologists, rehabilitation officers, school and college administrators, social workers, employment interviewers, personnel directors, librarians, parents, clergymen, psychiatrists, and others to whom people turn when they want facts about jobs to help them decide what they will do to earn a living. The book covers the important areas of where to get occupational information, how to use it in counselling, and how to use it in teaching. The first part of the book identifies the kinds of occupational information that counselors and clients need, suggestions on where to get this information and how to appraise it. Following chapters discuss basic theories of occupational choice and the use of occupational information in counseling. Subsequent chapters consider the principles and methods of teaching occupations and describe a variety of ways in which occupational information may be presented to groups of all kinds.

Since there still appears to be misunderstanding concerning the role of the occupational therapist in the field of job placement and selection, this book may help those therapists who are faced with this issue get a clear picture of this subject, and may aid in clarifying various aspects of this field.

—Lester M. Brower, M.A., O.T.R., R.P.T.

PARANOID MECHANISMS IN THE AGED. Jack Shep. *Psychiatry*, 21:4 (November) 1958, pp. 399-404.

Understanding of the pathological behavior and thinking of the patient with senile psychosis as an attempt to resolve by denial the threatening situation of illness and old age can be therapeutically useful.

In our society, with its emphasis on youth and the social value of independence, it is particularly difficult for many to accept the inevitable dependence of old age.

When cerebral incompetence, which inevitably involves disorders in the pattern of perception and false appraisals of the environment, is added to the other disabilities of old age, communication breaks down. Though the patient usually denies his need for help, the plea for loving care in the symptoms is unmistakable and must be recognized. When dependency is forced the symptoms improve.

The cerebral incompetence of these patients seems to be characterized by disordered sensory organization of spatial and temporal relationships. Thus they have tremendous difficulty in performing even ordinary tasks which depend on perceiving and responding to multiple stimuli.

The patient must be relieved of the fear of abandonment and loss of loving care, and the environmental demands must be reduced to the level of functional competence. Then the patient can be adapted to his environment with only minor symptoms.

—June L. Mazer, O.T.R.

SUSPENSION THERAPY IN REHABILITATION. Margaret Hollis, M.C.S.P., and Margaret H. S. Roper, M.C.S.P. Baltimore: Williams & Wilkins Co. 1958, $6.00, 220 pp.

The purpose of this book is to provide an up-to-date practical text-book on the use of suspension and spring and pulley therapy. The authors adequately accomplish this. The first part deals in detail with mechanical principles, techniques, and methods of suspension, spring and pulley therapy and the history of the development of these techniques. The second part describes the clinical application of suspension and spring and pulley therapy in special conditions. These latter chapters were written by several contributors. Techniques and principles in the use of suspension and pulley therapy are described for orthopedic, rheumatic, paraplegic, amputee, geriatric and neurological patients.

This book is important to the field of rehabilitation. It clearly and concisely explains an important area of therapy which is often omitted from treatment programs. Although the book is probably more significant to the physical therapist, there are important applications to be made by the occupational therapist. Kinetic occupational therapy can be more meaningful to the therapist who has a background in suspension and spring and pulley therapy. Therapists who frequently use weaving in their treatment programs should read this book.

—Lester M. Brower, M.A., O.T.R., R.P.T.

THE ART OF WOOD CARVING. John Upton. Princeton: D. Van Nostrand Co., 1958, $5.50, 130 pp.

The processes in wood carving in the round and in relief are simply discussed and illustrated with photographs and drawings. Beginning tools and equipment are listed to show that extensive and expensive outlay is not necessary for good work. Woods and finishes are also covered. The author's favorite subject is the eagle and many of those carved by him are pictured. The processes he describes in carving an eagle are easily adaptable to all other forms of carving. This is a valuable reference book on a specific subject.

—Ruth Melsheimer, O.T.R.

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Registered occupational therapists for new admission building in psychiatric hospital 12 miles out of Boston. Salary range $3,497-$4,511. For further information contact: Miss Helen Storr, O.T.R., Head Occupational Therapist, Metropolitan State Hospital, Waltham 54, Mass.

Immediate opening for registered occupational therapist at university medical center department of psychiatry. Modern teaching hospital with 54 beds. Work in close cooperation with psychiatric training program. Well equipped facilities. Situated in small university town with unusual cultural and recreational facilities. Salary $3516 to $4312. Three weeks paid vacation plus holidays, two weeks sick leave and benefits. Write for details and applications to George C. Ham, M.D., Chairman, Department of Psychiatry, University of North Carolina, Chapel Hill, N. C.

Openings for two O.T.R.'s-beginning or experienced. Participate in a program of total psychiatric treatment and rehabilitation, also in federally-sponsored research project in rehabilitation. Opportunity for in-service professional training. Complete maintenance $40.00 per month, 2 weeks vacation, 40 hour week, liberal sick and ret. benefits under civil service, $4100-$5000. Hospital near center of Salem, the beautiful capital city. Write Mr. Miller, O.T.R., Oregon State Hospital, Salem, Oregon.

OTR's wanted immediately for psychiatric positions in both the adult and children's sections of Allentown State Hospital. OT-I salary $4,329-$5,529. Graduation OT school required. OT-II salary $4,773-$6,090, minimum two years' experience. Benefits include: civil service status, retirement plan, three weeks vacation, thirteen paid holidays, liberal sick leave policy. Write: Patient Activities Coordinator, Allentown State Hospital, Allentown, Pa.

Occupational therapist wanted to direct well-organized program in a new rehabilitation center now under construction in Thermopolis, Wyoming. Approach will be that of total rehabilitation with physical, occupational, and speech therapists and vocational counselor, under the supervision of a physiatrist. Salary $350 to $400. Write Gottsche Rehabilitation Center, Thermopolis, Wyoming.

Opening available for senior occupational therapist in the Institute for the Crippled and Disabled, a comprehensive rehabilitation center. For further information contact: Miss Thelma L. Wellerson, O.T.R., Director of Occupational Therapy, 400 First Avenue, New York City 10, N. Y.

Occupational therapist, registered, staff level; interested in working with amputees, polios, paraplegics, cerebral palsy and related diagnoses. Rehabilitation hospital with present bed capacity of 65 beds. Planning now underway for expansion of in-patient and out-patient facilities. Progressive personnel policies. Salary commensurate with experience and training. Apply Administrator, Eastern N.Y. Orthopaedic Hospital-School, Inc., 124 Rosa Road, Schenectady 8, New York.

Immediate placement for registered, qualified occupational therapists in rapidly expanding physical medicine and rehabilitation institute serving two hospitals, total 1,000 general medical and surgical beds, in largest centrally located industrial center in Illinois. Experience in supervisory position and in comprehensive rehabilitation center necessary. Write: Administrator, Institute of Physical Medicine and Rehabilitation, 619 North Glen Oak Avenue, Peoria, Illinois.

Wanted: Registered occupational therapist II (director), salary $4,472 to $5,564, depending on qualifications. Relatively new department with growth possibilities. Paid vacation, sick leave, legal holidays, excellent retirement system, group life insurance. Apply: Peter W. Bowman, M.D., Supt., Pineland Hosp. & Training Center, Box C, Pownal, Maine.

Immediate employment for registered occupational therapist in large general hospital. Opening in pediatrics area. Forty hour week, paid sick leave, holidays, three weeks vacation. Good starting salary. Write or contact Dr. Edward E. Gordon, Director, Physical Medicine Department, Michael Reese Hospital, 29th Street and Ellis Avenue, Chicago, Illinois

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Openings available for staff and supervisory occupational therapists in Minnesota's mental health program—salary $4440 to $6072 dependent on experience. Vacancy for rehabilitation therapies supervisor, $5400 to $6564—degree plus several years of supervisory experience. Personnel Director, Dept. of Public Welfare, 117 University Ave., St. Paul 1, Minnesota.

Registered staff or senior therapist position available at a comprehensive rehabilitation hospital. Work week 35 hours. Annual and sick leave granted. Salary open. Arthur E. White, M.D., Physiatrist, National Orthopaedic and Rehabilitation Hospital, 2455 Army-Navy Drive, Arlington, Virginia.

OTR for staff position, out-patient CP diagnostic and treatment center. Part-time, salary $3000, with promise of full-time employment in January, 1960. Excellent working conditions, two and one-half months vacation. Contact Robert Schlitt, Peninsula Cerebral Palsy Training Center, 901 24th Street, Newport News, Virginia.

Wanted: OTR, female with psychiatric experience. To assume responsibility, after a period of indoctrination, for 45-bed private unit. Benefits—board/room, Blue Cross, sick leave, social security, insurance policy after one year, other standard benefits. Salary open. Elmcrest Manor, 25 Marlborough St., Portland, Conn.

Occupational therapist staff position, preferably some experience in cerebral palsy. Outpatient center, all ages, offering physical therapy, occupational therapy, speech therapy and special education. Some student training program. Annual four weeks paid vacation. Hours: 8:30 to 4:00, Monday through Friday. Salary open. Apply: Miss Modenna M. Brossard, R.P.T., Coordinator, 502 W. Mistletoe Avenue, United Cerebral Palsy Treatment Center, San Antonio, Texas.

Occupational therapist—out-patient clinic treating all handicapping entities. Salary, depends on experience. Primarily interested in developing program of pre-vocational and vocational training of physically handicapped adults. Testing for ADL, administering of all OT modalities with accent on functional approach: attendance at all medical clinics. Experience desired. Personal interview desired. Apply to Edmund S. McLaughlin, Executive Director, Bridgeport Chapter, Inc., Connecticut Society for Crippled Children & Adults, 85 Park Avenue, Bridgeport 4, Conn.

Edmonton, Alberta, Canada. Female registered occupational therapists wanted for positions in modern rehabilitation clinic for the industrial disabled, which has been in operation since 1953. Gross monthly income $260.00 to $315.00, which includes cost-of-living bonus adjusted quarterly. Pension plan in effect. Medical and hospitalization benefits available. Working conditions: eight-hour day, five-day week, annual leave with pay. Further details on request. Applicant requested to furnish details as to training, qualifications, experience, etc., to Dr. J. R. Fowler, Medical Director, Rehabilitation Clinic, Workmen's Compensation Board, Edmonton, Canada.

Two staff OTR's needed for expanding program in a progressive training center for mentally retarded and epileptic. Scope of OT includes treatment of physical disabilities and emotional disturbances, as well as help in initial adjustment to institution and ADL. Two new buildings, congenial staff of 8; flexible program, which is medically supervised. Meals, laundry and medical care furnished. University of Florida and Medical School in same town; beaches within 100 mile radius. Write to: Mr. R. C. Philips, Superintendent, Sunland Training Center, P.O. Box 508, Gainesville, Florida.

An occupational therapist needed immediately to fill the vacancy in brand newly constructed rehabilitation center. Experienced preferred but not necessary. Starting salary from $4200 to $4800, mal-practice insurance, adequate sick leave and vacation. If interested contact E. D. Jordan, OTR, Executive Director, Box 705, Lafayette, Louisiana.

Registered occupational therapist to further develop and head new department in 180-bed geriatric institution. New OT facilities to be included in building program now in planning stage. Three weeks paid vacation, sick leave, holidays, 5-day week, meals. Beginning salary $4800.00. Position open May 15, 1959. Write Administrator, River Bluff Nursing Home, N. Main Road, Rockford, Illinois.

Wanted immediately: a qualified occupational therapist for a staff position in the Rehabilitation Center for the Crippled, Huntsville, Alabama. The department is well equipped and a growing center in a rapidly expanding city. The salary range is from $3600 to $5040 annually. If interested, please contact C. R. Owens, Rehabilitation Center for the Crippled, 316 Longwood Drive, S.W., Huntsville, Alabama.

Chief occupational therapist. 900 bed hospital closely affiliated with Western Reserve University. Opportunities to develop functional clinical department. Position includes a faculty appointment and participation in teaching students of medicine, physical therapy, occupational therapy, and nursing. A master's degree with two years clinical experience with salary in a $6,000 range. Hilda B. Case, M.D., Director of Physical Medicine & Rehabilitation, University Hospitals of Cleveland, 2065 Adelbert Road, Cleveland 6, Ohio.

Do OT's exist? This hospital has unusual advantages to offer members of this vanishing species—a liberal, OT-minded administration; modern occupational therapy building, fully equipped, but not fully staffed; up-to-date living quarters, complete maintenance $316. per year; large student training program; wide range of craft supplies and activities; a growing program that is outgrowing the present staff; salary—interesting and adjustable; automatic yearly increments; paid vacations, holidays, and sick time; 40-hour week; health insurance, and retirement plans, plus social security; vital statistics—state, psychiatric, 3000-bed, average patient stay 3 months, A.M.A. accredited. Are you interested: Contact Mrs. Virginia Holmberg, OTR, Connecticut State Hospital, Middletown, Connecticut.

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Words like these apply to the special interest areas of the O.T. Department of Children's Hospital—

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Apply at the Personnel Department, Children's Hospital, Columbus, Ohio.

Immediate openings for registered occupational therapists and graduates of approved schools eligible for registration, in 2000 bed chronic disease hospital affiliated with New York Medical College. Positions available in children's rehabilitation (primarily cerebral palsy), adult rehabilitation, and ward program. Five day week, four weeks paid vacation, eleven holidays, twelve days sick benefit. Salary $3750-4830. Write Mrs. Carolyn Aggarwal, OTR, Bird S. Coler Hospital, Welfare Island, New York 17, N. Y.

Immediate opening for occupational therapist, registered or eligible for registration. Acute, intensive treatment, psychiatric hospital with student affiliation, research and teaching programs. Located in large university medical center. Modern recreational facilities available. Salary range $4020 to $6300; beginning salary commensurate with experience. Contact Virginia L. Caskey, OTR, Coordinator of Activity Therapy, Larue D. Carter Memorial Hospital, Indianapolis 7, Indiana.

University Hospital at Saskatoon, Saskatchewan, Canada, now has vacancies for occupational therapists in rehabilitation and psychiatric areas. New 535 bed progressive teaching hospital. Departments offer additional training under medical supervision in all fields. Salary $265 to $362.50 depending on qualifications and experience. Benefits include three weeks annual holiday with pay and three weeks sick leave per year. Applications should be directed to the Personnel Office.

Director: modern hospital treating tuberculosis and allied pulmonary diseases. Occupational therapy and nurse affiliation programs. Patient rehabilitation conferences with heads of professional services. Complete cooperation of medical staff. Close liaison with active state rehabilitation program. Five-day, 40 hour week, paid vacations, 7 holidays, sick leave, social security. Excellent opportunity for progressive middle aged administrator. Present director accompanying transferred husband. Send resume to W. C. Anderson, Executive Director, Emily P. Bissell Hospital, 3000 Newport Gap Pike, Wilmington 8, Delaware.

Wanted: additional occupational therapist for 170 bed chronic disease/tuberculosis hospital. Living quarters if desired; starting salary attractive. Many employee benefits. Write: American Legion Hospital, Battle Creek, Michigan.

OTR's needed for new geriatric hospital. Program includes functional activities and ADL; assist in supervisory and administrative duties. Salary $3,497-$4,511—commensurate with qualifications. Write for details: Mrs. Georgia L. Eacker, Head O.T., Cushing Hospital, Framingham, Massachusetts.

Immediate opening for occupational therapist, registered or eligible for registration. 1700 bed progressive mental hospital located in college town. Salary range $4020 to $6300. Full maintenance available. Yearly merit increases. Other benefits. Excellent opportunity for rapid advancement. Interested in recent graduates. Richmond State Hospital, Richmond, Indiana.

Immediate opening for a staff occupational therapist in a well equipped large private hospital. Excellent facilities, including a training kitchen. All inclusive program, servicing the rehabilitation division, psychiatric divison and the acute division. Good working conditions with excellent experience available. Attractive well lighted, air conditioned department in the new wing. Three weeks paid vacation a year, 5 day, 40 hour week. Write: Robert J. Hickok, coordinator, The Jewish Hospital of St. Louis, 216 So. Kingshighway, St. Louis 10, Mo.

Staff therapist for vacancy in June or July. For information and application write to Jerome Crystal, OTR, Director of Occupational Therapy, Harmarville Rehabilitation Center, Ridge Road, Pittsburgh 38, Pennsylvania.

Immediate opening: registered OT for growing psychiatric unit in expanding medical center. Starting salary $350, 5 day week, 3 week paid vacation and sick time annually. Contact Louis J. West, M.D., University of Oklahoma Medical Center, 800 N.E. 13th St., Oklahoma City, Oklahoma.

Occupational therapist, registered, for expanding department in progressive mental hospital in Chicago suburb. Opportunity for advancement—salary commensurate with experience. Write or call Morris B. Squire, Hospital Administrator, Forest Hospital, 555 Wilson Lane, Des Plaines, Illinois.

Director of occupational therapy: state mental hospital —liberal employee benefits. Housing facilities available. Must be registered. Starting salary $6366—$318 yearly increment for six years. Contact John E. Ellingham, Personnel Director, Ancora State Hospital, Hammonton, N. J.

Occupational therapist to direct program in 400 bed TB hospital located in pleasant university town. Living quarters, uniform laundry, vacation and other benefiits. Write Medical Director, W. T. Edwards Tuberculosis Hospital, 2323 Philips Road, Tallahassee, Florida.

Immediate opening for qualified registered occupational therapist. 200 bed hospital. 40 hour week. Salary open. Facilities in new rehabilitation addition. Psychiatric, polio and paraplegic rehabilitation programs. Contact Sister Concepta, Saint Vincent's Hospital, Billings, Montana.

Occupational therapist to head program in 1500 patient psychiatric hospital. Salary range $4212-5046, 40 hour week, maintenance at $40.00. Write Personnel Officer, Eastern Oregon State Hospital, Pendleton, Oregon.

Occupational therapist: Immediate placement with state crippled children's program. Full team approach. Car provided, 4 weeks' vacation, merit system increments, retirement benefits. Salary: OT-I, $4,500-$5,200; OT-II, $4,860-$5,580. Staff of 4 physical therapists and 2 occupational therapists under orthopedic supervision. Write to Dr. Jack Sabloff, Director, State Board of Health, Division of Crippled Children's Services, Dover, Delaware.

Immediate opening for registered therapist to take charge of occupational therapy program. New rehabilitation center equipped with modern facilities. Must be willing to work with all types of disabilities in a coordinated and comprehensive rehabilitation program. Five-day week with paid holidays and vacation. Salary open and commensurate with experience and training. Apply: Director, Rehabilitation Center, Saint Mark's Hospital, Salt Lake City 16, Utah.

Positions available for staff occupational therapists as of July, 1959, for 200 bed psychiatric hospital in Queens, New York. Present staff of 7 therapists ultimately expanding to 12 therapists for intensive treatment program. Salary $4140 to $5180 depending upon experience, 4 weeks vacation, blue cross, annual increments, 5 day week. Write Eileen K. Fischer, Director, O.T. Dept., Hillside Hospital, 57-59 263rd St., Glen Oaks, New York. Phone, Fieldstone 3-7800.

O.T.R. with at least three years experience for supervisor of department in comprehensive rehabilitation center. Salary open. 37½ hour week, ample sick leave. For further information write: Edward B. Shires, M.D., Medical Director, Rehabilitation Institute, 3600 Troost, Kansas City, Missouri.

Come to the hub of culture! Occupational therapist for expanding rehabilitation center of 150-200 beds in Boston. Rehabilitative team approach with physical and speech therapy under physiatrist. Program primarily geriatric. Salary: based on experience. For further information contact Mrs. Frank Scammell, O.T.R., Director of Occupational Therapy, Jewish Memorial Hospital, 59 Townsend St., Boston 19, Mass.

Occupational therapist staff position will be available about June 15, 1959, at the Psychiatric Institute of the University of Maryland Hospital. This is a sixty bed unit accommodating persons of various diagnostic categories, from psychoses to psychosomatic illnesses. Recent graduate therapists will be considered. For further details contact Mr. Roman Nagorka, OTR, Director OT and RT Department, Psychiatric Institute, 645 W. Redwood Street, Baltimore 1, Maryland.

Occupational therapists (staff) interested in positions in Indiana, write to Sophia Lindahl, Placement Service I.O.T.A., 3000 W. Washington, Indianapolis 22.

Position for director of occupational therapy, 1800 bed psychiatric hospital. Civil service, retirement plan. Salary $5529-8163 depending on qualifications. Write: Patient Activities Coordinator, Allentown State Hospital, Allentown, Pa.

Occupational therapist wanted, 200 bed general hospital, located in South Jersey within 15 mile radius of Philadelphia. Some experience in geriatric program necessary. Salary open, 40 hour week (5 days) employee benefits. Apply in writing, giving practical and educational background to Camden County General Hospital, Blackwood Post Office, Lakeland, New Jersey.

The Hartford Rehabilitation Center affords challenging and diversified opportunity for experienced registered therapist. Position for supervisor of occupational therapy effective June, 1959, will include administration of orthopedic, prevocational, student, volunteer and community education programs in progressive out-patient setting and liaison with Greater Hartford Home Care Plan. Salary commensurate with experience; personal interview required. Contact Patricia Plaisted, O.T.R., Hartford Rehabilitation Center, Inc., 2 Holcomb Street, Hartford, Connecticut.

Beautiful new Younker Memorial Rehabilitation Center, recent 120 bed addition to Iowa Methodist Hospital, has openings for staff therapists. Both in and out-patient work. Competent supervision, professional staff and assistants. 40 hour week, good pay and benefits. Opportunity for promotion. Excellent working relationships. Des Moines is city of over 200,000 population with outstanding recreational and cultural events. For complete information contact Personnel Director, Iowa Methodist Hospital, Des Moines, Iowa.

Occupational therapists for California state hospitals. Progressive program presents opportunities for imaginative, resourceful therapeutic activities. OTR works as member of professional team toward goal of total rehabilitation of the individual patient Requires registration with national registry of American Occupational Therapy Association. Pleasant working conditions; excellent merit system and employee benefits. Write for details to State Personnel Board, 801 Capitol Avenue, Sacramento, California.

OTR to direct rapidly expanding department in progressive 450 bed home and hospital for the aged—challenging opportunity in geriatric rehabilitation—diversified program. Salary open. Good personnel practices. Maintenance available. Maxine Leibowitz, Director of OT, Menorah Home and Hospital, 871 Bushwick Avenue, Brooklyn, N. Y.

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Wayne State University, College of Liberal Arts, Detroit 1, Michigan. *Assoc. Prof. Barbara Jewett, O.T.R., Chairman, O.T. Dept., Rehabilitation Institute, 261 Brady St.*

Western Michigan University, Kalamazoo 45, Michigan. *Assoc. Prof. Rosalia Kiss, O.T.R., Head, O.T. Dept.*

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